STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

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

Permit No.	MO-0112771
Owner:	Bridgeton Landfill, LLC
Address:	13570 St. Charles Rock Road, Bridgeton, MO 63044
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Bridgeton Landfill
Facility Address:	13570 St. Charles Rock Road, Bridgeton, MO 63044
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

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

FACILITY DESCRIPTION

See page 2

Leachate cannot be discharged under this permit. Stormwater which has come into contact with leachate is considered leachate and cannot be discharged. Leachate, and stormwater which has come into contact with leachate, must be managed in accordance with the provisions contained in the Missouri Solid Waste Management Laws, regulations, and Sanitary Landfill Operating Permit; and Hazardous Waste Program (if applicable).

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

March 1, 2018
Effective Date

Edward B. Galbraith, Director, Division of Environmental Quality

September 30, 2020
Expiration Date

Chris Wieberg, Director, Water Protection Program

FACILITY DESCRIPTION (CONTINUED)

Bridgeton Landfill is a capped former sanitary landfill, located within the West Lake Landfill Superfund Site. The West Lake Landfill Superfund Site has been divided into two operable units. West Lake Landfill Operable Unit 1 (OU-1) consists of separate areas identified in the 2008 OU-1 Record of Decision as Area 1, Area 2, and the Buffer Zone/Crossroad Property. Westlake Landfill Operable Unit 2 (OU-2) consists of the portions of the Superfund Site not known to contain Radiologically-impacted material (RIM). OU-2 is divided into three areas identified in the 2008 OU-2 Record of Decision as the Former Active (Bridgeton) Sanitary Landfill, Closed Demolition Landfill, and Inactive Sanitary Landfill. This permit covers the two applicable portions of the West Lake Landfill Superfund Site OU-2, the Former Active (Bridgeton) Sanitary Landfill and the Closed Demolition Landfill; which are designated in this permit as Bridgeton Landfill and Demolition Landfill. Areas within OU-1 contain RIM and are under the oversight of the EPA Superfund program. The Inactive Sanitary Landfill in OU-2 also remains under the oversight of the EPA Superfund program.

The Bridgeton landfill waste mass encompasses approximately 52 acres which extends approximately 240 feet below the ground surface and historically exhibited a total waste thickness of 320 feet. The sanitary landfill waste is located in two distinct areas known as the North and South Quarries. Bridgeton Landfill was initially permitted on Nov. 18, 1985 and ceased accepting waste on Dec. 31, 2004. A subsurface smoldering event has been ongoing within the South Quarry of Bridgeton Landfill since at least December 2010. The South Quarry and much of the North Quarry is covered with an Ethylene Vinyl Alcohol (EVOH) capping material to reduce odors and improve the collection of gas and liquids. There is an onsite leachate pre-treatment plant. After pre-treatment, the leachate is discharged to the Metropolitan St. Louis Sewer District (MSD). Outside the pre-treatment plant are multiple large leachate storage and treatment tanks. Solids remaining from the pre-treatment process are characterized and trucked off-site for proper disposal. Leachate infrastructure contained on the landfill is overseen by the DNR Solid Waste Management Program while the pre-treatment plant itself is operated under permit and oversight of MSD. Discharge of leachate is not authorized under this stormwater permit. Bridgeton also has numerous above ground tanks located in the drainage area of Outfall #003 which are used to store diesel fuel and used oil.

An active waste transfer station is also located within the boundaries of Bridgeton Landfill, and is associated with heavy truck traffic. Per DNR Solid Waste Management Program records, it is estimated to receive and transfer approximately 16,000-28,000 tons of waste a month. The transfer station tipping floor is surrounded by three walls and is under roof. Stored waste is not exposed to stormwater. Wastewater from the transfer station is sent to the Bridgeton Landfill leachate management system. The stormwater in the vicinity of the transfer station is discharged to outfall #007.

Bridgeton Hauling Fleet Management parking lot shares discharge with outfall #004. Bridgeton Hauling is currently permitted under MO-R80C276.

Missouri Asphalt Products (Missouri Asphalt) leases land from Bridgeton Landfill, LLC. Missouri Asphalt is currently permitted under MO-G491316. Discharge from Missouri Asphalt is not authorized from any Bridgeton Landfill outfalls under MO-0112771. Missouri Asphalt discharges its stormwater through an outfall which does not discharge Bridgeton Landfill stormwater.

A map of the drainage area for each outfall can be found in the permit application and the fact sheet below. Actual flow of all outfalls is dependent on precipitation.

OUTFALL #001
Eliminated in 2011 renewal, water rerouted to outfall #007.

OUTFALL #002
Eliminated in 2004 renewal. A record of why this outfall was made inactive was not found by the permit writer.

OUTFALL # 003 – Stormwater – SIC # 4953
Receives discharge from a retention pond on the southwest side of the landfill. Stormwater to this pond drains from the leachate pre-treatment facility, the holding area for a 97,000 gallon leachate tank, the heat removal system (with an approximately 20,000 gallon storage tank), the maintenance building and fuel storage tanks, the auxiliary utility flare, the western portion of Bridgeton Landfill, and the eastern portion of the Inactive Sanitary Landfill. Stormwater sheet flows and is directed toward perimeter channels around the landfill footprint before entering the retention pond. This outfall drains approximately 71.7 acres.

Legal Description:	Landgrant 131, St. Louis County
UTM Coordinates:	X = 721556, Y = 4293546
Receiving Stream:	Tributary to Old Fee Fee Creek
First Classified Stream and ID:	8-20-13 MUDD V.1.0 (C) 3960
USGS Basin & Sub-watershed No.:	Cowmire Creek-Missouri River (10300200-0801)
Flow in 10 yr 24 hr rain event:	7.7 MGD
Actual flow:	Dependent upon precipitation

FACILITY DESCRIPTION (CONTINUED)

OUTFALL # 004 – Stormwater – SIC # 4953, 4231
Receives discharge from a sediment pond to the East of the landfill footprint. Stormwater to this pond drains from the soil borrow area and the northeast portion of the Bridgeton Landfill (previously directed to outfall #006). Bridgeton Hauling Fleet management parking lot also discharges to this sediment pond. Stormwater is collected in the perimeter channel and drained into a retention basin before entering the sediment pond. This outfall drains approximately 72.5 acres.

Legal Description:	Landgrant 131, St. Louis County
UTM Coordinates:	X = 722592, Y = 4293974
Receiving Stream:	Tributary to Missouri River
First Classified Stream and ID:	Missouri River (P) 1604
USGS Basin & Sub-watershed No.:	Cowmire Creek-Missouri River (10300200-0801)
Flow in 10 yr 24 hr rain event:	7.8 MGD

OUTFALL # 005 – Stormwater – SIC # 4953
Receives discharge from a retention basin located on the southeast corner of the landfill property. Stormwater to this pond drains from the eastern portion of the Bridgeton Landfill. Stormwater sheet flows down the slope of the landfill to a perimeter channel, then to the retention basin. The outfall drains approximately 37.9 acres.

Legal Description:	Landgrant 131, St. Louis County
UTM Coordinates:	X = 722101, Y = 4293495
Receiving Stream:	Tributary to Old Fee Fee Creek
First Classified Stream and ID:	8-20-13 MUDD V.1.0 (C) 3960
USGS Basin & Sub-watershed No.:	Cowmire Creek-Missouri River (10300200-0801)
Flow in 10 yr 24 hr rain event:	4.1 MGD

OUTFALL # 006
Eliminated in this renewal. Discharge from the retention pond discharging to outfall #006 has been rerouted to the drainage area for outfall #004.

OUTFALL # 007 – Stormwater – SIC # 4953
Receives stormwater from various closed landfills on the property (including West Lake Landfill OU-1, OU-2 Demolition Landfill, and OU-2 Inactive Sanitary Landfill) and the container storage area to the west of the office building. The outfall also collects stormwater from the transfer station located onsite. A concrete lined perimeter channel, with several rock check dams, drains stormwater to the outfall. This outfall drains approximately 46.6 acres.

Legal Description:	Landgrant 131, St. Louis County
UTM Coordinates:	X = 722195, Y = 4294529
Receiving Stream:	Tributary to Old Fee Fee Creek
First Classified Stream and ID:	8-20-13 MUDD V.1.0 (C) 3960
USGS Basin & Sub-watershed No.:	Cowmire Creek-Missouri River (10300200-0801)
Flow in 10 yr 24 hr rain event:	5.0 MGD

OUTFALL # 008 – Stormwater – SIC # 4953
Receives stormwater from the northern portion of the Bridgeton Landfill and OU-1, Area 1. Acreage drained is ~8 acres.

Legal Description:	Landgrant 131, St. Louis County
UTM Coordinates:	X = 722379, Y = 4294335
Receiving Stream:	Tributary to Missouri River
First Classified Stream and ID:	Missouri River (P) 1604
USGS Basin & Sub-watershed No.:	Cowmire Creek-Missouri River (10300200-0801)
Flow in 10 yr 24 hr rain event:	0.2 MGD

OUTFALL # 009 – Stormwater – SIC # 4953
Receives stormwater from the northern portion of the Demolition Landfill and the east portion of Westlake Landfill OU-1, Area 2.

Legal Description:	Landgrant 131, St. Louis County
UTM Coordinates:	X = 721983, Y = 4294769
Receiving Stream:	Tributary to Old Fee Fee Creek
First Classified Stream and ID:	8-20-13 MUDD V.1.0 (C) 3960
USGS Basin & Sub-watershed No.:	Cowmire Creek-Missouri River (10300200-0801)
Flow in 10 yr 24 hr rain event:	0.9 MGD

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL #003, #004, #005, #007 *Stormwater Outfalls*	**TABLE A-1** **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **March 1, 2018** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCHMARKS	MONITORING REQUIREMENTS∞	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY ◊	SAMPLE TYPE
PHYSICAL						
Flow	MGD	*		-	once/quarter	24 hr. est.
Precipitation	inches	*		-	once/quarter	measured
CONVENTIONAL						
Biochemical Oxygen Demand (BOD_5)	mg/L	45		-	once/quarter	grab
Chemical Oxygen Demand	mg/L	120		-	once/quarter	grab
Oil & Grease	mg/L	15		-	once/quarter	grab
pH Ω	SU	6.5 to 9.0		-	once/quarter	grab
Settleable Solids	mL/L/hr	**		1.5	once/quarter	grab
METALS						
Aluminum, Total Recoverable	µg/L	**		750	once/quarter	grab
Antimony, Total Recoverable	µg/L	*		-	once/quarter	grab
Arsenic, Total Recoverable	µg/L	**		33	once/quarter	grab
Chromium (VI), Dissolved	µg/L	*		-	once/quarter	grab
Copper, Total Recoverable	µg/L	**		22	once/quarter	grab
Iron, Total Recoverable	µg/L	4000		-	once/quarter	grab
Selenium, Total Recoverable	µg/L	*		-	once/quarter	grab
Thallium, Total Recoverable	µg/L	*		-	once/quarter	grab
Zinc, Total Recoverable	µg/L	*		-	once/quarter	grab
NUTRIENTS						
Ammonia as N	mg/L	*		-	once/quarter	grab
OTHER						
Benzene	µg/L	*		-	once/quarter	grab
Chloride + Sulfate	mg/L	1000		-	once/quarter	grab
ELG						
α-Terpineol	mg/L	*		-	once/quarter	grab
Benzoic Acid	mg/L	*		-	once/quarter	grab
p-Cresol	mg/L	*		-	once/quarter	grab
Phenol	mg/L	*		-	once/quarter	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JULY 28, 2018. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
CONVENTIONAL						
Total Suspended Solids	mg/L	80		-	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE APRIL 28, 2018. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

See notes on page 9

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, CONTINUED

OUTFALL #003, #004, #005, #007 *Stormwater Outfalls*	**TABLE A-2 FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **March 1, 2018** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCHMARKS	MONITORING REQUIREMENTS∞	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY	SAMPLE TYPE
METALS						
Beryllium, Total Recoverable	µg/L	*		-	once/year	grab
Cadmium, Total Recoverable	µg/L	*		-	once/year	grab
Chromium (III), Total Recoverable	µg/L	*		-	once/year	grab
Lead, Total Recoverable	µg/L	*		-	once/year	grab
Mercury, Total Recoverable	µg/L	*		-	once/year	grab
Nickel, Total Recoverable	µg/L	*		-	once/year	grab
MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE JANUARY 28, 2019. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

See notes on page 9

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, CONTINUED

OUTFALL #008, #009 *Stormwater Outfall*	**TABLE A-5 INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective on **March 1, 2018** and remain in effect through **February 29, 2020**. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	INTERIM LIMITATIONS		BENCHMARKS	MONITORING REQUIREMENTS∞	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY ◊	SAMPLE TYPE
PHYSICAL						
Flow	MGD	*		-	once/quarter	24 hr. est
Precipitation	inches	*		-	once/quarter	measured
CONVENTIONAL						
Biochemical Oxygen Demand (BOD_5)	mg/L	*		-	once/quarter	grab
Chemical Oxygen Demand	mg/L	*		-	once/quarter	grab
Oil & Grease	mg/L	*		-	once/quarter	grab
pH Ω	SU	6.5-9.0		-	once/quarter	grab
Settleable Solids	mL/L/hr	**		1.5	once/quarter	grab
METALS						
Aluminum, Total Recoverable	µg/L	**		750	once/quarter	grab
Antimony, Total Recoverable	µg/L	*		-	once/quarter	grab
Arsenic, Total Recoverable	µg/L	**		33	once/quarter	grab
Beryllium, Total Recoverable	µg/L	*		-	once/quarter	grab
Cadmium, Total Recoverable	µg/L	*		-	once/quarter	grab
Chromium (III), Total Recoverable	µg/L	*		-	once/quarter	grab
Chromium (VI), Dissolved	µg/L	*		-	once/quarter	grab
Cobalt, Total Recoverable	µg/L	*		-	once/quarter	grab
Copper, Total Recoverable	µg/L	*		22	once/quarter	grab
Iron, Total Recoverable	µg/L	*		-	once/quarter	grab
Lead, Total Recoverable	µg/L	*		-	once/quarter	grab
Mercury, Total Recoverable	µg/L	*		-	once/quarter	grab
Nickel, Total Recoverable	µg/L	*		-	once/quarter	grab
Selenium, Total Recoverable	µg/L	*		-	once/quarter	grab
Silver, Total Recoverable	µg/L	*		-	once/quarter	grab
Thallium, Total Recoverable	µg/L	*		-	once/quarter	grab
Zinc, Total Recoverable	µg/L	*		-	once/quarter	grab
NUTRIENTS						
Ammonia as N	mg/L	*		-	once/quarter	grab
OTHER						
Benzene	µg/L	*		-	once/quarter	grab
Chloride + Sulfate	mg/L	*		-	once/quarter	grab
ELG						
α-Terpineol	mg/L	*		-	once/quarter	grab
Benzoic Acid	mg/L	*		-	once/quarter	grab
p-Cresol	mg/L	*		-	once/quarter	grab
Phenol	mg/L	*		-	once/quarter	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JULY 28, 2018. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
CONVENTIONAL						
Total Suspended Solids	mg/L	*		-	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE APRIL 28, 2018. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

See notes on page 9

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, CONTINUED

OUTFALL #008, #009 *Stormwater Outfall*	**TABLE A-6 FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **March 1, 2020** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCHMARKS	MONITORING REQUIREMENTS∞	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY ◊	SAMPLE TYPE
PHYSICAL						
Flow	MGD	*		-	once/quarter	24 hr. est
Precipitation	inches	*		-	once/quarter	measured
CONVENTIONAL						
Biochemical Oxygen Demand (BOD_5)	mg/L	45		-	once/quarter	grab
Chemical Oxygen Demand	mg/L	120		-	once/quarter	grab
Oil & Grease	mg/L	15		-	once/quarter	grab
pH Ω	SU	6.5-9.0		-	once/quarter	grab
Settleable Solids	mL/L/hr	**		1.5	once/quarter	grab
METALS						
Aluminum, Total Recoverable	µg/L	**		750	once/quarter	grab
Antimony, Total Recoverable	µg/L	*		-	once/quarter	grab
Arsenic, Total Recoverable	µg/L	**		33	once/quarter	grab
Beryllium, Total Recoverable	µg/L	*		-	once/quarter	grab
Cadmium, Total Recoverable	µg/L	*		-	once/quarter	grab
Chromium (III), Total Recoverable	µg/L	*		-	once/quarter	grab
Chromium (VI), Dissolved	µg/L	*		-	once/quarter	grab
Cobalt, Total Recoverable	µg/L	*		-	once/quarter	grab
Copper, Total Recoverable	µg/L	*		22	once/quarter	grab
Iron, Total Recoverable	µg/L	4000		-	once/quarter	grab
Lead, Total Recoverable	µg/L	*		-	once/quarter	grab
Mercury, Total Recoverable	µg/L	*		-	once/quarter	grab
Nickel, Total Recoverable	µg/L	*		-	once/quarter	grab
Selenium, Total Recoverable	µg/L	*		-	once/quarter	grab
Silver, Total Recoverable	µg/L	*		-	once/quarter	grab
Thallium, Total Recoverable	µg/L	*		-	once/quarter	grab
Zinc, Total Recoverable	µg/L	*		-	once/quarter	grab
NUTRIENTS						
Ammonia as N	mg/L	*		-	once/quarter	grab
OTHER						
Benzene	µg/L	*		-	once/quarter	grab
Chloride + Sulfate	mg/L	1000		-	once/quarter	grab
ELG						
α-Terpineol	mg/L	*		-	once/quarter	grab
Benzoic Acid	mg/L	*		-	once/quarter	grab
p-Cresol	mg/L	*		-	once/quarter	grab
Phenol	mg/L	*		-	once/quarter	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JULY 28, 2020. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
CONVENTIONAL						
Total Suspended Solids	mg/L	80		-	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE APRIL 28, 2020. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

See notes on page 9

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, CONTINUED

OUTFALL #007, 008, #009 *Stormwater Outfalls*	**TABLE A-7** **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **March 1, 2018** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCHMARKS	MONITORING REQUIREMENTS∞	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY	SAMPLE TYPE
METALS						
Barium, Total Recoverable	µg/L	*		-	once/quarter ◊	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JULY 28, 2018. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
RADIONUCLIDES***						
Gross Alpha	pCi/L	*		-	once/month	grab
Beta Particle and Photon Radioactivity (Gross Beta)	pCi/L	*		-	once/month	grab
Radium-226 + Radium-228	pCi/L	*		-	once/month	grab
Radium-226	pCi/L	*		-	once/month	grab
Radium-228	pCi/L	*		-	once/month	grab
Thorium-230	pCi/L	*		-	once/month	grab
Thorium-232	pCi/L	*		-	once/month	grab
Uranium, Total	µg/L	*		-	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE APRIL 28, 2018. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
RADIONUCLIDES***						
Beta Particle and Photon Radioactivity (Gross Beta)	mrem	*		-	Note 1	calculated
MONITORING REPORTS SHALL BE SUBMITTED ON THE 28TH DAY OF THE MONTH FOLLOWING SAMPLING IN ACCORDANCE WITH NOTE 1. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

See notes on page 9

NOTES:

* Monitoring requirement only.

** Monitoring requirement with associated benchmark. See Special Conditions #9 through #12

*** Unless substitute methods are approved by the Department, analysis shall be conducted in accordance with the radiological contaminant analytical methods in paragraphs 40 CFR 141.25(a) and (b) of the July 1, 2011, Code of Federal Regulations. This does not include later amendments or additions.

∞ All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and 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.

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

NOTE 1 For any monthly sample result for Beta Particle and Photon Radioactivity greater than 50 pCi/L, the radiation dose shall be calculated in millirem/year and submitted to the Department. In addition to the laboratory sheets for this parameter, the data and calculations used to total the millirem/year shall be submitted as an attachment. The calculated results and the attachment will be submitted on the 28th day of the month following the monthly sample. If the monthly sample result is 50 pCi/L or less, the radiation dose in millirem/year is not required.

◊ Quarterly sampling

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

B. SCHEDULE OF COMPLIANCE

Schedules of compliance are allowed per 40 CFR 122.47. The facility shall attain compliance with final effluent limitations established in this permit as soon as reasonably achievable:

1. Within six months of the effective date of this permit, the permittee shall report progress made in attaining compliance with the final effluent limits.

2. The permittee shall submit interim progress reports detailing progress made in attaining compliance with the final effluent limits every 12 months from effective date. The first report is due March 01, 2019.

3. Within 2 years of the effective date of this permit, the permittee shall attain compliance with the final effluent limits at outfall #008 and #009, for total suspended solids, biological oxygen demand, chemical oxygen demand, oil and grease, iron, and chloride + sulfate.

Please submit progress reports via the electronic reporting system after the implementation of electronic reporting for this permit. Prior to implementation of electronic reporting, please submit progress reports to:

Missouri Department of Natural Resources:
St. Louis Regional Office
7545 S. Lindbergh, STE 210
St. Louis, MO 63125

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. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit shall be reopened and modified, or alternatively revoked and reissued:
   (a) To comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
      i. contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
      ii. controls any pollutant not limited in the permit.
   (b) To incorporate new or modified effluent limitations or other conditions, if the result of a wasteload allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
   (c) To incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.
   (d) If the Department determines the permittee's discharges cause, have reasonable potential to cause, or are contributing to exceedances of Missouri's Water Quality Standards.

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

3. Changes in Discharges of Toxic Pollutant
   In addition to the reporting requirements under §122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
   (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 that pollutant in the permit application in accordance with §122.21(g)(7).
      (4) The level established by the Director in accordance with §122.44(f).

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

5. Electronic Discharge Monitoring Report (eDMR) Submission System
   (a) Discharge Monitoring Reporting Requirements. The permittee shall submit an eDMR Permit Holder and Certifier Registration form within **90 days** of the effective date of this permit. 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 a timely, complete, accurate, and nationally-consistent set of data. Visit http://dnr.mo.gov/pubs/pub2474.pdf to access the Facility Participation Package which contains the eDMR Permit Holder and Certifier Registration form.
   Once the permittee is activated in the eDMR system:
   (b) Programmatic Reporting Requirements. The following reports (if required by this permit) must be electronically submitted as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the data:
      (1) Schedule of Compliance Progress Reports;
      (2) Any additional report required by the permit excluding bypass reporting.
      After such a system has been made available by the department, required data shall be directly input into the system by the next report due date.
   (c) Other actions. The following shall be submitted electronically after such a system has been made available by the department:
      (1) General Permit Applications/Notices of Intent to discharge (NOIs);
      (2) Notices of Termination (NOTs);
      (3) No Exposure Certifications (NOEs);

D. SPECIAL CONDITIONS (CONTINUED)

(4) Low Erosivity Waivers and Other Waivers from Stormwater Controls (LEWs); and
(5) Bypass reporting.

(d) Electronic Submissions. To access the eDMR system, use the following link in your web browser: https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx.

(e) Waivers from Electronic Reporting. The permittee must electronically submit compliance monitoring data and reports unless a waiver is granted by the department in compliance with 40 CFR Part 127. The permittee may obtain an electronic reporting waiver by first submitting an eDMR Waiver Request Form: http://dnr.mo.gov/forms/780-2692-f.pdf. The department will either approve or deny this electronic reporting waiver request within 120 calendar days. Only permittees with an approved waiver request may submit monitoring data and reports on paper to the Department for the period the approved electronic reporting waiver is effective.

6. Reporting of Non-Detects
   (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way the precision and accuracy of the analyzed result can be enumerated.
   (b) The permittee shall not report a sample result as "Non-Detect" without also reporting the detection limit of the test. Reporting as "Non-Detect" without also including the detection limit will be considered failure to report, which is a violation of this permit.
   (c) The permittee shall report the "Non-Detect" result using the less than sign and the minimum detection limit (e.g. <10).
   (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for the parameter.
   (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
   (f) When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the "<MDL" shall be reported as indicated in item (C).

7. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

8. Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 *et. seq*.) and the use of such pesticides shall be in a manner consistent with its label.

9. The purpose of the Stormwater Pollution Prevention Plan (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 not effective preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.

10. This facility shall implement a SWPPP. Facility SIC codes found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2) shall implement a SWPPP and must be prepared and implemented upon permit issuance. The SWPPP must be kept on-site and should not be sent to the department unless specifically requested. The SWPPP must be reviewed and updated every five (5) years or as site conditions change (see Rationale and Derivation: antidegradation analysis and SWPPP in the fact sheet). The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in February 2009 (www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf). The SWPPP must include:
    (a) A listing of specific contaminants and their control measures (or BMPs) and a narrative explaining how BMPs are implemented to control and minimize the amount of contaminants potentially entering stormwater.
    (b) The SWPPP must include a schedule for once per month 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. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
        i. Operational deficiencies must be corrected within seven (7) calendar days.
        ii. Minor structural deficiencies must be corrected within fourteen (14) calendar days.
        iii. Major structural deficiencies must be reported to the regional office within seven (7) days of discovery. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including the general timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. The permittee will work with the regional office to determine the best course of action, including but not limited to temporary structures to control stormwater runoff. The facility shall correct the major structural deficiency as soon as reasonably achievable.
        iv. All actions taken to correct the deficiencies shall be included with the written report, including photographs.
        v. 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 and EPA personnel upon request.
    (c) A provision for designating an individual to be responsible for environmental matters.

D. SPECIAL CONDITIONS (CONTINUED)

(d) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.

11. This permit stipulates pollutant benchmarks applicable to your discharge. The benchmarks do not constitute direct numeric effluent limitations; therefore, a benchmark exceedance alone is not a permit violation. Benchmark monitoring and visual inspections shall be used to determine the overall effectiveness of SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If a sample exceeds a benchmark concentration you must review your SWPPP and your BMPs to determine what improvements or additional controls are needed to reduce that pollutant in your stormwater discharge(s).

    Any time a benchmark exceedance occurs a Corrective Action Report (CAR) must be completed. A CAR is a document that records the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. CARs must be retained with the SWPPP and available to the department upon request. If the efforts taken by the facility are not sufficient and subsequent exceedances of a benchmark occur, the facility must contact the department if a benchmark value cannot be achieved. Failure to take corrective action to address a benchmark exceedance and failure to make measureable progress towards achieving the benchmarks is a permit violation.

12. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
    (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of stormwater from these substances.
    (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
    (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so 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.
    (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
    (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property to comply with general water quality criteria, effluent limits, or benchmarks. This could include the use of straw bales, silt fences, or sediment basins, if needed.
    (f) Ensure adequate provisions are provided to prevent surface water intrusion into the storage basins, to divert stormwater runoff around the storage basin, and to protect embankments from erosion.
    (g) The permittee shall remove the sediment from the stormwater sediment ponds no less than every five to ten years, or more frequently depending on the amount of sediment and water they receive (sediment accumulation shall be no more than 6-12 inches).

13. To protect the general criteria found at 10 CSR 20-7.031(4), before releasing water accumulated in petroleum secondary containment areas, it must be examined for hydrocarbon odor and presence of sheen. If the presence of odor or sheen is indicated, the water shall be treated using an appropriate method or disposed of in accordance with legally approved methods, such as being sent to a wastewater treatment facility. Following treatment, the water shall be tested for oil and grease, benzene, toluene, ethylbenzene, and xylene using 40 CFR part 136 methods. All pollutant levels must be below the most protective, applicable standards for the receiving stream, found in 10 CSR 20-7.031 Table A. Records of all testing and treatment of water accumulated in secondary containment shall be stored in the SWPPP to be available on demand to DNR and EPA personnel.

14. Before releasing water accumulated in secondary containment for the leachate collection tanks, it must be examined for the presence of sheen. If sheen is present, the water may not be released and must be treated as leachate and disposed of using approved leachate management methods. In the event of a leachate release into the secondary containment, the accumulated stormwater and leachate must be treated as leachate and disposed of using approved leachate management methods. No additional water may be discharged from secondary containment which has held water with sheen and/or leachate until approval is granted by the Department. Approval shall be granted after the cause of the release is disclosed and repaired, and the secondary containment is cleaned to the satisfaction of the department.

15. Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the SWPPP and made available to the department upon request.

D. SPECIAL CONDITIONS (CONTINUED)

16. This permit shall be reopened and modified, or alternatively revoked and reissued, at such time the department has determined the Stormwater Monitoring Plan for West Lake Landfill Operable Units 1 and 2, under the jurisdiction of U.S. EPA, is insufficient to monitor or control pollutants originating from West Lake Landfill Operable Units 1 and 2, and discharging to waters of the state. The permittee shall have 30 days to respond to and address any reopening or revocation of the permit under this condition. The permittee shall have the opportunity to comment or appeal any modification or reissuance of the permit, in accordance with administrative procedures.

17. Permittee shall submit laboratory reports including data, quality assurance analysis, and chain of custody, for all discharge monitoring conducted in accordance with this permit. When reporting through eDMR, this condition will be satisfied through the following:
    (a) Attaching all laboratory reports for the reporting period to the eDMR submission.
    (b) Confirming submission through the parameter labeled “Report due” (parameter code 85539). Reporting “0” for this parameter indicates all laboratory reports are attached. Reporting “1” indicates the all laboratory reports are not attached.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0112771
BRIDGETON LANDFILL, LLC.

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

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

Part I. FACILITY INFORMATION

Facility Type:	Categorical Industrial Stormwater
Facility SIC Code(s):	4953
Application Date:	12/28/2015
Modification Date:	06/16/2014
Expiration Date:	04/21/2016
Last Inspection:	12/12/2013, Found to be Out of Compliance

FACILITY DESCRIPTION:
Bridgeton Landfill is a capped former sanitary landfill, located within the West Lake Landfill Superfund Site. The West Lake Landfill Superfund Site has been divided into two operable units. West Lake Landfill Operable Unit 1 (OU-1) consists of separate areas identified in the 2008 OU-1 Record of Decision as Area 1, Area 2, and the Buffer Zone/Crossroad Property. Westlake Landfill Operable Unit 2 (OU-2) consists of the portions of the Superfund Site not known to contain Radiologically-impacted material (RIM). OU-2 is divided into three areas identified in the 2008 OU-2 Record of Decision as the Former Active (Bridgeton) Sanitary Landfill, Closed Demolition Landfill, and Inactive Sanitary Landfill. This permit covers the two applicable portions of the West Lake Landfill Superfund Site OU-2, the Former Active (Bridgeton) Sanitary Landfill and the Closed Demolition Landfill; which are designated in this permit as Bridgeton Landfill and Demolition Landfill. Areas within OU-1 contain RIM and are under the oversight of the EPA Superfund program. The Inactive Sanitary Landfill in OU-2 also remains under the oversight of the EPA Superfund program.

The Bridgeton landfill waste mass encompasses approximately 52 acres which extends approximately 240 feet below the ground surface and historically exhibited a total waste thickness of 320 feet. The sanitary landfill waste is located in two distinct areas known as the North and South Quarries. Bridgeton Landfill was initially permitted on Nov. 18, 1985 and ceased accepting waste on Dec. 31, 2004. A subsurface smoldering event has been ongoing within the South Quarry of Bridgeton Landfill since at least December 2010. The South Quarry and much of the North Quarry are covered with an EVOH capping material to reduce odors and improve the collection of gas and liquids. There is an onsite leachate pre-treatment plant. After pre-treatment, the leachate is discharged to MSD. Outside the pre-treatment plant are multiple large leachate storage and treatment tanks. Solids remaining from the pre-treatment process are characterized and trucked off-site for proper disposal. Leachate management infrastructure contained on the landfill is overseen by the DNR Solid Waste Management Program while, the pre-treatment plant itself is operated under permit and oversight of the MSD. Discharge of leachate is not authorized under this stormwater permit. Bridgeton also has numerous aboveground tanks located in the drainage area of Outfall #003 which are used to store diesel fuel and used oil.

An active waste transfer station is also located within the boundaries of Bridgeton Landfill, and is associated with heavy truck traffic. Per DNR Solid Waste Management Program records, it is estimated to receive and transfer approximately 16,000-28,000 tons of waste a month. The transfer station tipping floor is surrounded by three walls and is under roof. Stored waste is not exposed to stormwater. Wastewater from the transfer station is sent to the Bridgeton Landfill leachate management system. The stormwater in the vicinity of the transfer station is discharged to outfall #007.

Bridgeton Hauling Fleet Management parking lot shares discharge with outfall #004. Bridgeton Hauling is currently permitted under MO-R80C276.

Missouri Asphalt Products (Missouri Asphalt) leases land from Bridgeton Landfill, LLC. Missouri Asphalt is currently permitted under MO-G491316. Discharge from Missouri Asphalt is not authorized from any Bridgeton Landfill outfalls under MO-0112771. Missouri Asphalt discharges its stormwater through an outfall which does not discharge Bridgeton Landfill stormwater.

Sources and additional information:
www.epa.gov/mo/west-lake-landfill, last accessed 04/05/2017
http://dnr.mo.gov/bridgeton/index.html, last accessed 04/05/2017
http://dnr.mo.gov/env/hwp/fedfac/westlakelandfill-ffs.htm, last accessed 04/05/2017

PERMITTED FEATURES TABLE:

OUTFALL	AVERAGE FLOW (MGD)	EST. FLOW IN A 10 YR 24 HOUR EVENT (MGD)	TREATMENT LEVEL	EFFLUENT TYPE
#003	dependent on precipitation	7.7	BMPs, primary sedimentation	landfill stormwater
#004	dependent on precipitation	7.8	BMPs, primary sedimentation	landfill and industrial stormwater
#005	dependent on precipitation	4.1	BMPs, primary sedimentation	landfill stormwater
#006	Removed from this permit, re-routed to outfall #004			
#007	dependent on precipitation	5.0	BMPs	landfill and transfer station stormwater
#008	dependent on precipitation	0.2	BMPs	landfill stormwater
#009	dependent on precipitation	0.9	BMPs	landfill stormwater

*Calculated using the Rational Method, acreage supplied by permittee, rainfall 5.0 inches, rational runoff coefficient 0.8.

FACILITY PERFORMANCE HISTORY & COMMENTS:
The electronic discharge monitoring reports were reviewed for the last five years. Numerous exceedances were observed at all the outfalls, most notably iron. Outfall #007 also had exceedances for BOD_5, COD, and TSS. In addition to exceedances of the permitted limits, the facility has exceeded water quality standards on several monitoring only parameters, most notably aluminum. Outfall #007 also exceeded the water quality standards several times for copper. After reviewing the DMR data, it is in the professional judgment of the permit writer the permittee is not utilizing sufficiently sensitive analytical methods for all parameters as required by Standard Conditions Part 1, Section A number 4. (See Part V, Sufficiently sensitive analytical methods, for more information.)

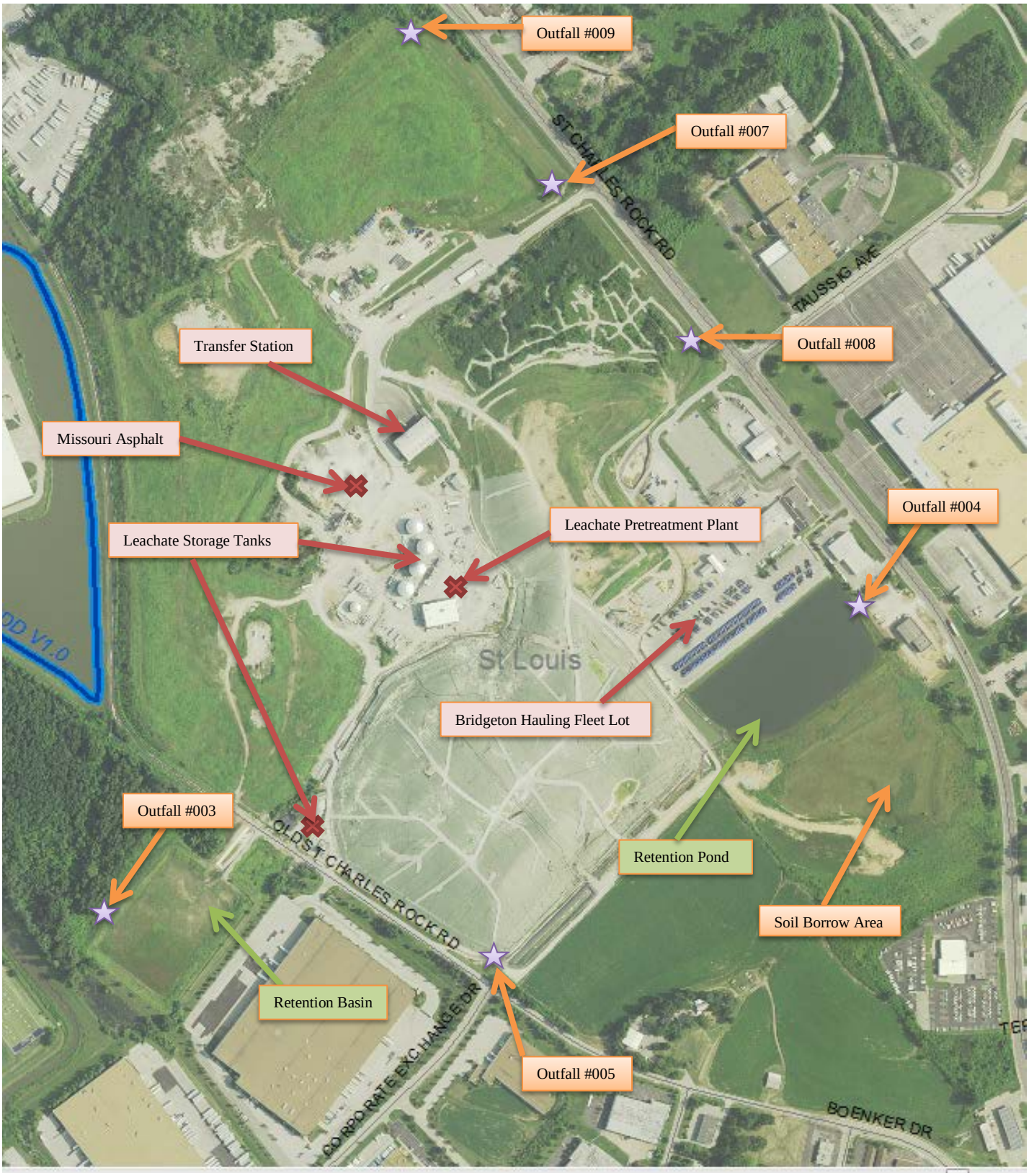
In addition to DMR violations, a number of other violations of Missouri's environmental laws and regulations have been documented at the facility. On December 23, 2010, Bridgeton reported a suspected subsurface smoldering event to DNR. In March 2013, the Missouri Attorney General filed a lawsuit against the landfill for violations of Missouri's environmental laws. This lawsuit is currently pending in the St. Louis County Circuit Court. The facility has experienced a number of leachate outbreaks, many related to the subsurface smoldering event.

On December 12, 2013, Bridgeton Landfill, LLC advised the department of a pump malfunction due to recent freezing temperatures resulted in an approximately 40,000 gallon leachate release earlier in the day. This was classified by the department as a "water pollution emergency". The impacted soil was remediated, and the affected stormwater basin was drained and sent to the leachate collection system. A letter of warning (LOW) was issued to Bridgeton Landfill, LLC dated January 29, 2014 in relation to this leachate release, which triggered a subsequent compliance inspection. A gate valve was installed to contain future spills on the site after this incident. A required action related to this inspection was Bridgeton's operating permit be modified to include ELG parameters on outfall #003. Their current permit does not reflect this modification. The permit writer is unable to determine the reason why this modification wasn't made. It is in the best professional judgment of the permit writer the inclusion of these parameters at all outfalls is prudent, considering the number of leachate outbreaks at this facility which have impacted the stormwater collection structures. The elevated aluminum, iron, TSS, COD, and BOD_5 at outfalls #003, #005, and #007 may indicate contamination of the stormwater with leachate. Outfall #004 does not have increased levels of many of these constituents, but in the interest of assuring consistent site BMP performance, will share these parameters with the other outfalls. The ELG parameters will be monitoring only. The ELG limit table is placed in this permit for informational purposes only and does not necessarily reflect water quality standards in the State of Missouri or requirements of this permit. If Missouri water quality standards are exceeded, it is the responsibility of the permittee to notify the Department. Exceedances of the ELG parameters would likely indicate a source of leachate at the receiving outfall, which should be remediated immediately.

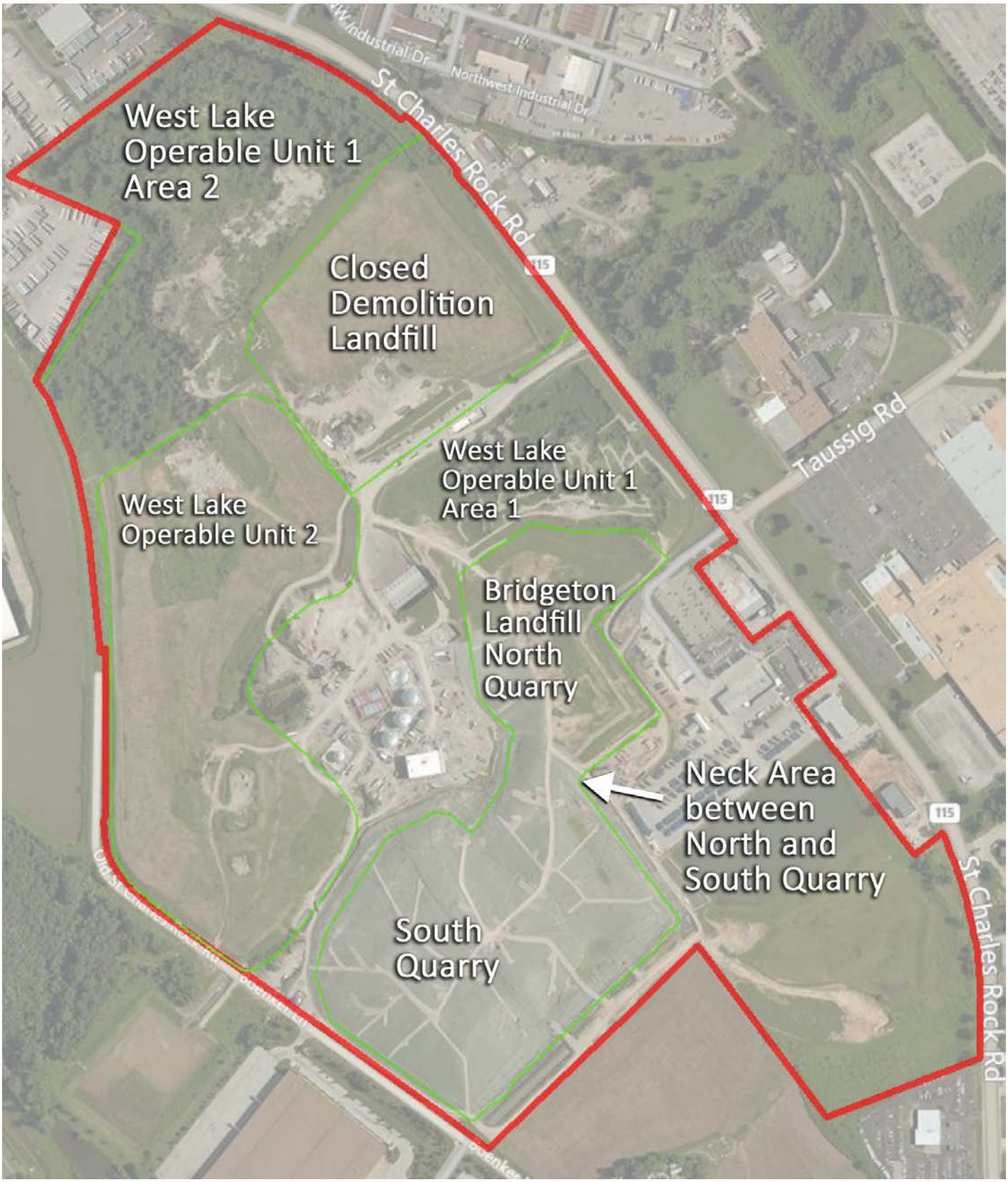
Landfills which utilize sediment ponds as a BMP require regular maintenance. Draining and removing the accumulated sediment sludge from stormwater basins which have received any leachate discharge is necessary to maintain the structures and to protect water quality. Retention basins can collect pollutants in the sediment which can be recirculated into the stormwater discharge during events causing turbidity in the water. It is generally advised to scoop the sediment from these ponds no less than every five to ten years, or more frequently depending on the amount of sediment and water they receive (sediment accumulation should be no more than 6-12 inches). Bridgeton Landfill is required to inspect and maintain their BMP structures per the conditions of this permit.

On December 29, 2015, Bridgeton Landfill, LLC reported unpermitted discharge of stormwater to the St. Louis Regional Office (SLRO). Six to ten inches of rainfall occurred over a short period of time, causing overtopping of a berm, spilling into a drainage ditch adjacent to St. Charles Rock Road. On-site drainage structures and channels were designed to collect and control at least the water volume from a 24-hour, 25 year storm. Outfall 008 is being incorporated into this permit to contain precipitation from a 100-year storm event (similar to the amount of rainfall received at the Bridgeton Landfill on December 29, 2015).

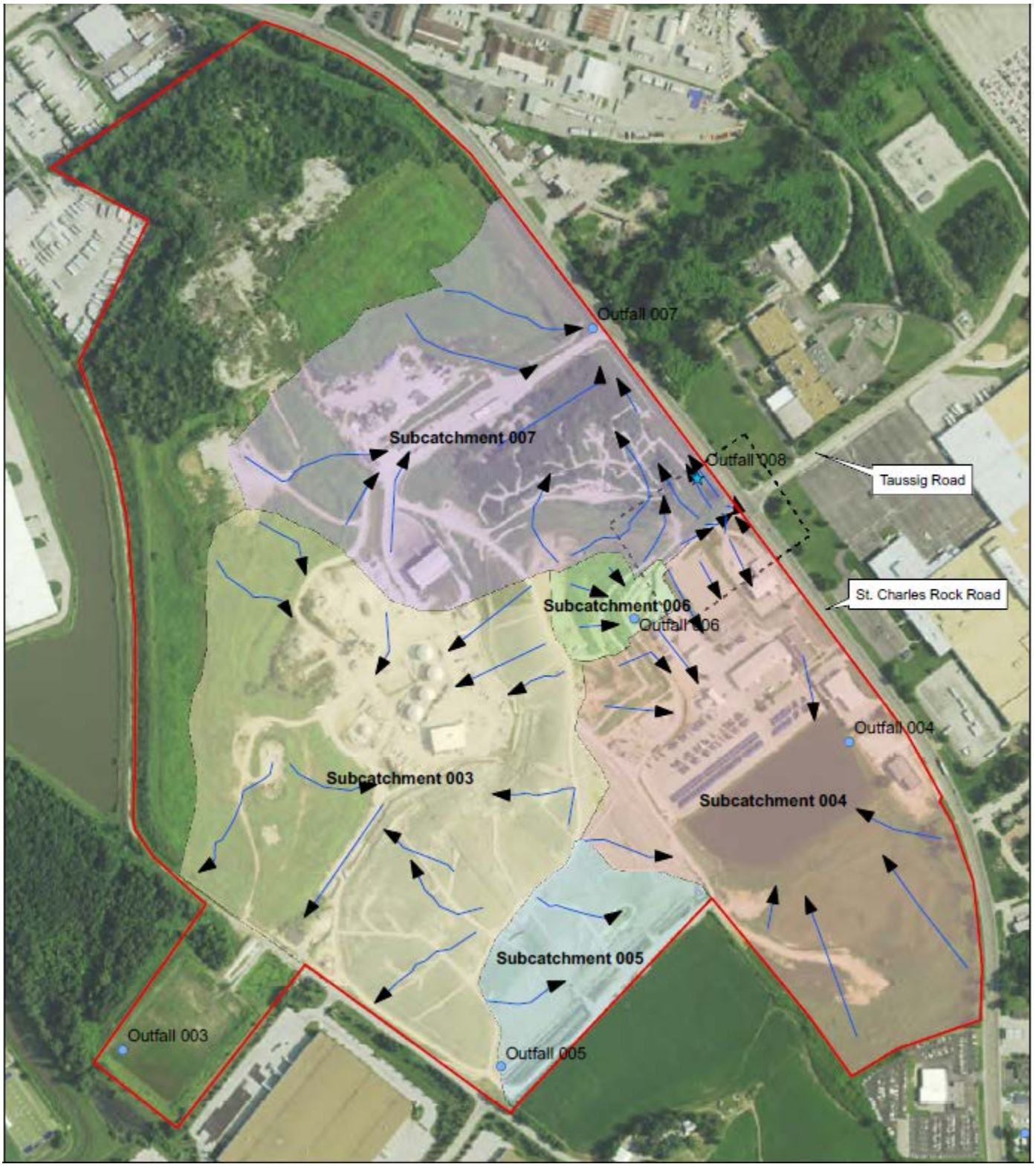
FACILITY MAPS:



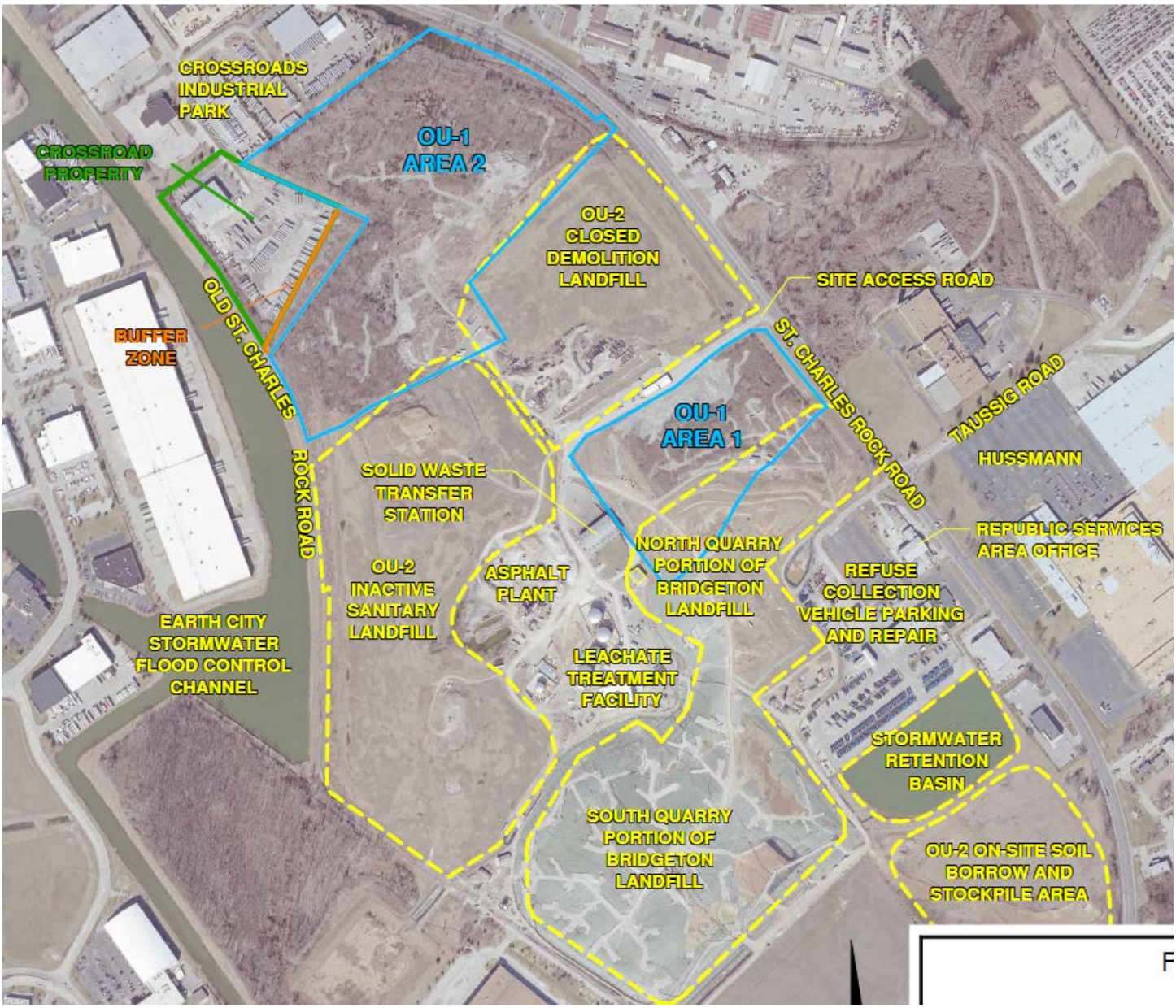
FACILITY MAPS CONTINUED:



FACILITY MAPS, CONTINUED:



FACILITY MAPS, CONTINUED:



Part II. RECEIVING STREAM INFORMATION

RECEIVING WATER BODY'S WATER QUALITY:
The receiving streams Tributary to Missouri River and Tributary to Old Fee Fee Creek have no concurrent water quality data available. Neither of the receiving streams is on the 303d List, is classified as losing, or is associated with a TMDL. However, the Missouri River Watershed is subject to a 2006 TMDL for PCBs and Chlordane. Tributary to Old Fee Fee Creek (C) (3960) is now classified whereas it was not classified in the previous permit, as EPA has approved the Department's new stream classifications.

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

✓ Not applicable; this facility does not discharge to an impaired segment of a 303(d) listed stream.

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

✓ Applicable; the facility is in the watershed of the Missouri River with a 2006 EPA approved TMDL for PCBs and Chlordane. The facility does not directly discharge to the Missouri River.

✓ This facility is not considered to be a source of the above listed pollutants or considered to contribute to the impairment, and is not mentioned in the TMDL document.

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

✓ As per Missouri's Effluent Regulations [10 CSR 20-7.015(1)(B)], the waters of the state are divided into the following seven categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's effluent limitation table and further discussed in the derivation & discussion of limits section.

Missouri or Mississippi River: ☐
Lake or Reservoir: ☐
Losing: ☐
Metropolitan No-Discharge: ☐
Special Stream: ☐
Subsurface Water: ☐
All Other Waters: ☒

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

RECEIVING STREAM MONITORING REQUIREMENTS:
No receiving water monitoring requirements are recommended at this time.

RECEIVING STREAMS TABLE:

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	DISTANCE TO SEGMENT (MILES)	12-DIGIT HUC
#003	Tributary to Old Fee Fee Creek	n/a	n/a	GEN	0.33	10300200-0801 Cowmire Creek-Missouri River
	8-20-13 MUDD V.1.0 Dataset Locally known as Old Fee Fee Creek	C	3960	AQL, IRR, LWW, SCR, WBC-B, HHP		
#004	Tributary to Missouri River	n/a	n/a	GEN	2.4	
	Missouri River	P	1604	AQL, DWS, IND, IRR, LWW, SCR, WBC-B, HHP		
#005	Tributary to Old Fee Fee Creek	n/a	n/a	GEN	0.68	
	8-20-13 MUDD V.1.0 Dataset Locally known as Old Fee Fee Creek	C	3960	AQL, IRR, LWW, SCR, WBC-B, HHP		
#007	Tributary to Old Fee Fee Creek	n/a	n/a	GEN	1.08	
	8-20-13 MUDD V.1.0 Dataset Locally known as Old Fee Fee Creek	C	3960	AQL, IRR, LWW, SCR, WBC-B, HHP		
#008	Tributary to Missouri River	n/a	n/a	GEN	2.1	
	Missouri River	P	1604	AQL, DWS, IND, IRR, LWW, SCR, WBC-B, HHP		
#009	Tributary to Old Fee Fee Creek	n/a	n/a	GEN	0.88	
	8-20-13 MUDD V.1.0 Dataset Locally known as Old Fee Fee Creek	C	3960	AQL, IRR, LWW, SCR, WBC-B, HHP		

n/a not applicable
WBID = Waterbody Identification: Missouri Use Designation Dataset 8-20-13 MUDD V1.0 data can be found as an ArcGIS shapefile on MSDIS at ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip
* As per 10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission's water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1st classified receiving stream's beneficial water uses to be maintained are in the receiving stream table in accordance with [10 CSR 20-7.031(1)(C)].

Uses which may be found in the receiving streams table, above:
10 CSR 20-7.031(1)(C)1.:
AQL = Protection of aquatic life (Current narrative use(s) are defined to ensure the protection and propagation of fish shellfish and wildlife, which is further subcategorized as: WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses AQL effluent limitations in 10 CSR 20-7.031 Table A for all habitat designations unless otherwise specified.)
10 CSR 20-7.031(1)(C)2.: Recreation in and on the water
WBC = Whole Body Contact recreation where the entire body is capable of being submerged;
WBC-A = Whole body contact recreation supporting swimming uses and has public access;
WBC-B = Whole body contact recreation supporting swimming;
SCR = Secondary Contact Recreation (like fishing, wading, and boating).
10 CSR 20-7.031(1)(C)3. to 7.:
HHP (formerly HHF) = Human Health Protection as it relates to the consumption of fish;
IRR = Irrigation for use on crops utilized for human or livestock consumption;
LWW = Livestock and wildlife watering (Current narrative use is defined as LWP = Livestock and Wildlife Protection);
DWS = Drinking Water Supply;
IND = Industrial water supply
10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Table A currently does not have corresponding habitat use criteria for these defined uses)
WSA = Storm- and flood-water storage and attenuation; WHP = Habitat for resident and migratory wildlife species;
WRC = Recreational, cultural, educational, scientific, and natural aesthetic values and uses; WHC = Hydrologic cycle maintenance.
10 CSR 20-7.031(6): GRW = Groundwater

Part III. RATIONALE AND DERIVATION OF EFFLUENT LIMITATIONS & PERMIT CONDITIONS

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

- ✓ Not applicable; the facility does not discharge to a losing stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)].

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

- ✓ Limitations in this operating permit for the reissuance conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
  - The Department determined technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
    - The previous permit limits for outfall #003-007 were established in error, based on limits for process wastewater, however, these are stormwater outfalls. This renewal establishes limits and benchmarks appropriate for stormwater discharges. There will be no changes to industrial activities onsite or the composition of the stormwater discharge as a result of this renewal. The benchmark concentrations and required corrective actions within this permit are protective of the receiving stream's uses to be maintained.
    - Five years of DMR data was made available to the permit writer for review and assessment of reasonable potential. Ammonia and settleable solids showed no reasonable potential of exceeding water quality standards; therefore, limits were removed from these parameters. A technology based benchmark of 1.5 mL/L/hr was placed on settleable solids, and ammonia is reduced to monitoring only. In addition, several parameters were removed from monitoring due to being reported absent on the application materials and DMR data showing non-detects: ethylbenzene, cobalt, and silver were removed.
    - Total recoverable iron limitations were changed from 1639 µg/L maximum daily and 817 µg/L monthly average limits, to a 4000 µg/L maximum daily limit. Previous limits for this parameter were based on the 1000 µg/L chronic water quality standard for protection of aquatic life. This permit utilizes acute limits on parameters where available. Due to the sporadic nature of stormwater discharges, the Department, under the direction of EPA guidance, has determined chronic standards are capricious measures of stormwater discharges. Chronic effluent limitations are based on the organism's ability to survive within the designated concentration for four days. Stormwater is rarely discharged continuously for four days. Conversely, acute water quality standards are applicable, but are non-existent for iron. After review of newly available studies, it is in the best professional judgment of the permit writer a discharge from this outfall at 4000 µg/L per storm event has no reasonable potential to cause an exceedance of the instream chronic water quality standard of 1000 µg/L over four days. 4000 µg/L as a maximum daily limit is therefore protective of the receiving stream's aquatic life.
    - The previous permit contained a specific set of prohibitions related to general criteria found in 10 CSR 20-7.031(4); however, there was no determination as to whether the discharges have reasonable potential to cause or contribute to excursion of those general water quality standards in the previous permit. Federal regulations 40 CFR 122.44(d)(1)(iii) requires that in instances were reasonable potential (RP) to cause or contribute to an exceedance of a water quality standard exists, a numeric limitation must be included in the permit. Rather than conducting the appropriate RP determination and establishing numeric effluent limitations for specific pollutant parameters, the previous permit simply placed the prohibitions in the permit. These conditions were removed from the permit. Appropriate reasonable potential determinations were conducted for each general criterion listed in 10 CSR 20-7.031(4) and effluent limitations were placed in the permit for those general criteria where it was determined the discharge had reasonable potential to cause or contribute to excursions of the general criteria. Specific effluent limitations were not included for those general criteria where it was determined the discharges will not cause or contribute to excursions of general criteria. Removal of the prohibitions does not reduce the protections of the permit or allow for impairment of the receiving stream. The permit maintains sufficient effluent limitations, monitoring requirements and best management practices to protect water quality.
    - Per a memorandum issued by the EPA entitled *Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies* (4/19/1996), the department has found the permittee eligible for reduced monitoring frequency on some parameters. Stormwater on site is controlled through a number of mechanisms including a SWPPP. A decreased sampling frequency is warranted for beryllium, cadmium, chromium (III), lead, mercury, and nickel at all outfalls.

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

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

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

- ✓ Applicable; the facility must review and maintain stormwater BMPs as appropriate.

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

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

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

- ✓ Applicable; this facility has stormwater-only outfalls with benchmark constraints. The benchmarks listed are consistently achieved in stormwater discharges by a variety of other industries with SWPPPs.

BIOSOLIDS & SEWAGE SLUDGE:
Biosolids are solid materials resulting from domestic wastewater treatment meeting federal and state criteria for beneficial use (i.e. fertilizer). Sewage sludge is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information: http://extension.missouri.edu/main/DisplayCategory.aspx?C=74 (WQ422 through WQ449).

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

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

- ✓ Applicable; the permittee/facility is currently under enforcement and in litigation with the Missouri Attorney General's Office for violations of the Missouri Clean Water Law and its implementing regulations. No specific enforcement actions have been determined at this time. The future outcome of this litigation may require the re-opening and modification of this permit to become compliant with enforcement actions. It is the responsibility of the permittee to request a permit modification in the event one becomes necessary.

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

- ✓ This facility is monitoring the groundwater at the site for their DNR Solid Waste Management Program permit. Reporting of this data to the Water Protection Program is not required at this time. Groundwater sampling is also required by EPA Superfund for the West Lake site. Remediation and monitoring of the groundwater at this site is under the jurisdiction of the EPA Superfund Program, and is designated by EPA as OU-3. Reporting of this data to the Water Protection Program is also not required at this time.

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

- ✓ Permittee is not authorized to land apply industrial sludge. Leachate pre-treatment sludge is removed by contract hauler and sent offsite for treatment and/or disposal. The oversight of the leachate pre-treatment sludge is generally overseen by DNR Solid Waste Management Program to ensure proper management of solid waste and by MSD under a facility specific treatment permit.

REASONABLE POTENTIAL ANALYSIS (RPA):
Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are (or may be) discharged at a level causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. If the permit writer determines any give pollutant has the reasonable potential to cause or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant [40 CFR Part 122.44(d)(1)(iii)].

- ✓ Not applicable; an RPA was not conducted for this facility. This permit establishes permit limits and benchmarks for stormwater. The department has determined stormwater is not a continuous discharge and is therefore not subject to mathematical RPAs. However, the permit writer completed an RPD, a reasonable potential determination, using best professional judgment for all of the appropriate parameters in this permit. An RPD consists of reviewing application data and/or the discharge monitoring data for the last five years and comparing those data to the water quality standard. An RPD also takes into consideration site specific characteristics of the discharge and location. Permit writers use the department's permit writer's manual (http://dnr.mo.gov/env/wpp/permits/manual/permit-manual.htm), the EPA's permit writer's manual (https://www.epa.gov/npdes/npdes-permit-writers-manual), program policies, and best professional judgment. For each parameter in each permit, the permit writer carefully considers all applicable information regarding: technology based effluent limitations, effluent limitation guidelines, water quality standards, stream flows and uses, and all applicable site specific information and data gathered by the permittee through discharge monitoring reports and renewal (or new) application sampling. Best professional judgment is based on the experience of the permit writer, cohorts in the department and resources at the EPA, research, and maintaining continuity of permits if necessary. For stormwater permits, the permit writer is required per 10 CSR 6.200(6)(B)2 to consider: A. application and other information supplied by the permittee; B. effluent guidelines; C. best professional judgment of the permit writer; D. water quality; and E. BMPs. Part IV provides specific decisions related to this permit.

SCHEDULE OF COMPLIANCE (SOC):
A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, effluent limits, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit. SOCs are allowed under 40 CFR 122.47 providing certain conditions are met.

- ✓ Applicable; a two year schedule of compliance is included for outfalls #008 and #009 for total suspended solids, BOD, COD, oil and grease, iron, and chloride + sulfate. A schedule is not provided for pH, as it is believed the facility can meet the limits at issuance.

SPILL REPORTING:
Per 10 CSR 24-3.010, any emergency involving a hazardous substance must be reported to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I. http://dnr.mo.gov/env/esp/spillbill.htm

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

It is likely sufficient rainfall to cause a discharge for four continuous days from a facility will also cause some significant amount of flow in the receiving stream. Chronic WQSs are based on a four-day exposure (except ammonia, which is based on a thirty day exposure). In the event a discharge does occur from this facility for four continuous days, some amount of flow will occur in the receiving stream. This flow will dilute stormwater discharges from a facility. For these reasons, most industrial stormwater facilities have limited potential to cause a violation of chronic water quality standards in the receiving stream.
Sufficient rainfall to cause a discharge for one hour or more from a facility would not necessarily cause significant flow in a receiving stream. Acute WQSs are based on a one hour of exposure, and must be protected at all times in unclassified streams, and within mixing zones of class P streams [10 CSR 20-7.031(4) and (5)(4)4.B.]. Therefore, industrial stormwater facilities with toxic contaminants do have the potential to cause a violation of acute WQSs if those toxic contaminants occur in sufficient amounts.

It is due to the items stated above staff drafting this fact sheet are unable to perform statistical Reasonable Potential Analysis (RPA) and calculate Wasteload Allocations (WLA) via a site-specific mass-balance equation for effluent limit determination. However, staff will use their best professional judgment in determining if a facility has a potential to violate Missouri's Water Quality Standards.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):
In accordance with 40 CFR 122.44(k), Best Management Practices (BMPs) must be used to control or abate the discharge of pollutants when: 1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; 2) Authorized under section 402(p) of the CWA for the control of stormwater discharges; 3) Numeric effluent limitations are infeasible; or 4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to 1) identify sources of pollution or contamination, and 2) select and carry out actions which prevent or control the pollution of storm water discharges.
A SWPPP must be prepared by the permittee if the SIC code is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2). A SWPPP may be required of other facilities where stormwater has been identified as necessitating better management. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate stream pollution from stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged during storm events. The following paragraph outlines the general steps the permittee should take to determine which BMPs will work to achieve the benchmark values or limits in the permit. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure assisting in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit.

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

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

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

If parameter-specific numeric exceedances continue to occur and the permittee feels there are no practicable or cost-effective BMPs which will sufficiently reduce a pollutant concentration in the discharge to the benchmark values established in the permit, the permittee can submit a request to re-evaluate the benchmark values. This request needs to include 1) a detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the benchmark values; 2) financial data of the company and documentation of cost associated with BMPs for review and 3) the SWPPP, which should contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information. This will allow the department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs. The request shall be submitted in the form of an operating permit modification; the application is found at: http://dnr.mo.gov/forms/index.html.

✓ Applicable; a SWPPP shall be developed and implemented for this facility.

VARIANCE:

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

✓ Not applicable; the operating permit is not drafted under premise of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

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

✓ Applicable; wasteload allocations were calculated where relevant using water quality criteria or water quality model results and by applying the dilution equation below:

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

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

- 7Q10 at this facility is expected to be 0.0 CFS. Upstream concentrations of pollutants will have no effect on the expected dilution at this facility, as no mixing is permitted.
- Acute wasteload allocations (daily maximum limits; MDL) were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).
- Water quality based maximum daily effluent limitations were calculated using methods and procedures outlined in USEPA's *Technical Support Document For Water Quality-based Toxics Control* or TSD EPA/505/2-90-001; March 1991.
- Number of Samples "n": In accordance with the TSD for water quality-based permitting, effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying distribution or treatment performance which should be, at a minimum, targeted to comply with the values dictated by the WLA. Therefore, it is recommended the actual planned frequency of monitoring normally be used to determine the value of "n" for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for "n" must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is "n = 4" at a minimum. For total ammonia as nitrogen, "n = 30" is used.
- 7Q10 at this facility is expected to be 0.0 CFS. Upstream concentrations of pollutants are expected to have no effect on the expected dilution at this facility; no mixing is permitted.

WLA MODELING:

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

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

WATER QUALITY STANDARDS:

Per 10 CSR 20-7.031(4), general criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, 40 CFR 122.44(d)(1) directs the department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including state narrative criteria for water quality.

WHOLE EFFLUENT TOXICITY (WET) TEST:
A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with, or through synergistic responses when mixed with receiving stream water. Under the federal Clean Water Act (CWA) §101(a)(3), requiring WET testing is reasonably appropriate for site-specific Missouri State Operating Permits for discharges to waters of the state issued under the National Pollutant Discharge Elimination System (NPDES). WET testing is also required by 40 CFR 122.44(d)(1). WET testing ensures the provisions in 10 CSR 20-6 and the Water Quality Standards in 10 CSR 20-7 are being met. Under 10 CSR 20-6.010(8)(A)4, the department may require other terms and conditions it deems necessary to assure compliance with the CWA and related regulations of the Missouri Clean Water Commission. The following Missouri Clean Water Laws (MCWL) apply: §644.051.3. requires the department to set permit conditions complying with the MCWL and CWA; §644.051.4 specifically references toxicity as an item we must consider in writing permits (along with water quality-based effluent limits); and §644.051.5. is the basic authority to require testing conditions.

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

Part IV. EFFLUENT LIMITS DETERMINATION

EFFLUENT LIMITATION GUIDELINE 40 CFR PART 445 LANDFILL POINT SOURCE CATEGORY
The EPA has developed effluent limitation guidelines for wastewater discharges associated with the operation and maintenance of landfills regulated under RCRA Subtitle D, non-hazardous waste landfills. The wastewater flows which are covered by the rule include leachate, gas collection condensate, drained free liquids, laboratory-derived wastewater, contaminated stormwater and contact wash water from truck exteriors and surface areas which have come into direct contact with solid waste at the landfill facility. Contaminated groundwater that is treated and discharged is excluded from this guideline. All landfills in the State of Missouri are required under Missouri Solid Waste Management Regulation [10 CSR 80-3.010(8)] to prevent stormwater flow onto the active portion of the sanitary landfill during peak discharge from at least a twenty-five year storm, and should therefore not release contaminated stormwater due to contact with the working face. Bridgeton is considered an “inactive” landfill per DNR Solid Waste Management Program. The facility no longer accepts waste and does not have exposed working faces of landfill at any time. Although the facility has not received official closure from the Solid Waste Management Program, the landfill is capped, and all stormwater flowing over the cap is considered exempt from ELG limitations. The outfalls at this site include monitoring or limits for ELG pollutants due to previous leachate outbreaks, and indications leachate may have impacted stormwater control structures. This site does not intend, nor is it engineered, to discharge treated leachate to surface water. However, monitoring for these parameters offers the permittee an important indicator in case of leachate outbreaks. Finding constituents such as phenol and benzoic acid in stormwater at this site would indicate a source of leachate in the effluent, whether a direct source, such as a leak in the leachate management system, or an indirect source, such as leachate lingering in the sediment collected in the stormwater control structures. Stormwater impacted by leachate is considered wastewater under 40 CFR Part 445.2, and must be treated in a no-discharge manner. Discharge of leachate contaminated stormwater, or any other landfill wastewater, is a violation of this permit.

ELG Limitations		
Regulated Parameter	Daily Maximum (mg/L)	Monthly Average (mg/L)
BOD_5	140	37
TSS	88	27
Ammonia as N	10	4.9
α – Terpineol	0.033	0.016
Benzoic Acid	0.12	0.071
p-Cresol	0.025	0.014
Phenol	0.026	0.015
Zinc	0.20	0.11
pH	6.0-9.0 SU	-

MONTHLY AVERAGE LIMITS
Monthly averages were not implemented in this permit as the discharge consists of only stormwater which is not continuous pursuant to 40 CFR Part 122.45(d). Further, average monthly limits are impracticable measures of non-continuous, stormwater discharges as they vary widely in frequency, magnitude and duration. This permit implores only short-term or daily maximum measures which are more representative of stormwater discharges which are sporadic in nature. Discharges of industrial stormwater rarely persist for long durations, making them impracticable to assess using measures with long term exposure or averaging periods. Finally, the instream water quality target remains unchanged and the conditions of this permit are protective of both narrative and numeric water quality criteria.

GENERAL CRITERIA CONSIDERATIONS:
In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants which have been determined to cause, have the reasonable potential to cause, or to contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The rule further states pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above a narrative criterion within an applicable State water quality standard, the permit shall contain a numeric effluent limitation to protect that narrative criterion. The previous permit included the narrative criteria as specific prohibitions placed upon the discharge. These prohibitions were included in the permit absent any discussion of the discharge's reasonable potential to cause or contribute to an excursion of the criterion. In order to comply with this regulation, the permit writer has completed a reasonable potential determination on whether the discharge has reasonable potential to cause, or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). These specific requirements are listed below followed by derivation and discussion (the lettering matches the rule itself, under 10 CSR 20-7.031(4)). In instances where reasonable potential exists, the permit includes numeric limitations to address the reasonable potential. In instances where reasonable potential does not exist the permit includes monitoring of the discharges potential to impact the receiving stream's narrative criteria. Finally, all of the previous permit narrative criteria prohibitions have been removed from the permit given they are addressed by numeric limits where reasonable potential exists. It should also be noted Section 644.076.1, RSMo as well as Section D – Administrative Requirements of Standard Conditions Part I of this permit state it shall be unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law or any standard, rule, or regulation promulgated by the commission.

(A) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.

It is in the best professional judgment of the permit writer there is no reasonable potential for discharge from any outfall of this facility to cause the formation of putrescent bottom deposits. The landfill is closed, and therefore stormwater has no contact with putrescible wastes. Additionally, all putrescible wastes are handled under roof in the transfer station.

The permit writer uses best professional judgment to determine reasonable potential for unsightly or harmful bottom deposits at outfalls #003, #004, #005, and #007 based on the DMR data and inspection information from this site. Total suspended solids are elevated at this site in the DMR data. In addition, photographs are available from previous inspections and site visits which show failures of BMP mechanisms and un-vegetated surfaces which increase the chances of solids being released. Total suspended solids include the settleable fraction which could have unsightly or harmful impacts on the receiving stream. A total suspended solids limit is continued in this permit from the previous permit which is protective of this general criterion.

Outfall #008 and outfall #009 do not have established DMR data or inspection reports available for review. The application does not contain information which suggests the permittee anticipates causing putrescent, unsightly, or harmful bottom deposits; therefore the permit writer does not find reasonable potential for excursions from this criterion. Reasonable potential will be re-assessed at renewal.

(B) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses.

The permit writer uses best professional judgment to determine reasonable potential for oil which may cause excursion from this criterion at outfalls #003, #004, and #007 based on the DMR data from this site. Oil and grease exceedances are noted at these outfalls. The permit limit of 15 mg/L for oil and grease is continued from the previous permit and is protective of this general criterion, so no additional numeric limitations are required. Outfall #005 does not indicate reasonable potential for exceedances based on past DMR data.

The permit writer does not find reasonable potential for scum or floating debris in the receiving stream at outfalls #003, #004, #005, and #007. No disclosures in the application material lead the permit writer to believe there is RP for excursion from this portion of the general criterion.

Outfall #008 and #009 do not have established DMR data or inspection reports available for review. The application does not contain information which suggests the permittee anticipates causing oil, scum, and floating debris; therefore the permit writer does not find reasonable potential for excursions from this criterion. Reasonable potential will be re-assessed at renewal.

(C) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.

It is in the best professional judgment of the permit writer there is no reasonable potential for discharge from any outfall of this facility to cause offensive odor. The landfill is closed, and therefore stormwater has no contact with putrescible wastes. Additionally, all putrescible wastes are handled under roof in the transfer station.

The permit writer uses best professional judgment to determine reasonable potential for substances in sufficient amounts to cause unsightly color or turbidity deposits at outfalls #003, #004, #005, and #007 based on the DMR data and inspection information from this site. Total suspended solids are elevated at this site in the DMR data. In addition, photographs are available from previous inspections and site visits which show failures of BMP mechanisms and un-vegetated surfaces which increase the chances of solids being released. Total suspended solids can cause unsightly color or turbidity in the receiving stream. A total suspended solids limit is continued in this permit from the previous permit which is protective of this general criterion.

Outfall #008 and #009 do not have established DMR data or inspection reports available for review. The application does not contain information which suggests the permittee anticipates causing unsightly color, turbidity, or offensive odor; therefore the permit writer does not find reasonable potential for excursions from this criterion. Reasonable potential will be re-assessed at renewal.

(D) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life.

The permit writer considered specific toxic pollutants when writing this permit. Numeric effluent limitations are included for those pollutants that could be discharged in toxic amounts. These effluent limitations are protective of human health, animals, and aquatic life.

(E) There shall be no significant human health hazard from incidental contact with the water.

The permit writer considered specific toxic pollutants when writing this permit. Numeric effluent limitations are included for those pollutants that could be discharged in toxic amounts. These effluent limitations are protective of human health, animals, and aquatic life.

(F) There shall be no acute toxicity to livestock or wildlife watering.

The permit writer considered specific toxic pollutants when writing this permit. Numeric effluent limitations are included for those pollutants that could be discharged in toxic amounts. These effluent limitations are protective of human health, animals, and aquatic life.

(G) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community.

The permit writer finds no reasonable potential for excursions from this criterion at outfalls #003, #004, #005, and #007. The application materials do not indicate any reason to believe physical, chemical, or hydrologic changes are planned at this site. In addition, various BMP measures are in place at these outfalls which slow the flow of stormwater discharge, including rock check dams and stormwater retention ponds. These measures reduce the probability physical, chemical, or hydrologic changes could occur in stream which would impair the natural biological community.

Outfall #008 does not have established DMR data or inspection reports available for review. The application does not contain information which suggests the permittee anticipates causing physical, chemical, or hydrologic changes which would impair the natural biological community; therefore the permit writer does not find reasonable potential for excursions from this criterion. Reasonable potential will be re-assessed at renewal.

(H) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Management Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

The permit writer uses best professional judgment to determine there is no reasonable potential for an excursion from this general criterion. This is a closed landfill which does not have waste exposed to stormwater. The transfer station operates under roof. None of the items listed above are expected to be disposed of in stream. Additionally, Bridgeton Landfill is subject to Missouri Solid Waste Management Regulations (10 CSR 80-3.010 (16)), which require the landfill be operated in an aesthetically acceptable manner. Litter control through various means is required by this regulation.

OUTFALLS #003, #004, #005, #007, #008, AND #009

Effluent limitations derived and established in the below effluent limitations table are based on current operations of the facility. Effluent means both process water and stormwater. Any flow through the outfall is considered a discharge and must be sampled and reported as provided below. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

PARAMETERS ALL OUTFALLS	UNIT	BASIS	DAILY MAXIMUM LIMIT	BENCHMARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
CONVENTIONAL								
TSS	MG/L	6	80	-	***	ONCE/MONTH	ONCE/MONTH	GRAB

NOTES:

* - Monitoring requirement only
** - Monitoring with associated benchmark
***-This parameter was 80/60 at all outfalls except #008 and #009, which were not established in the previous permit; therefore monitoring at these two outfalls is new with this permit.
ǂ The facility will report the minimum and maximum pH values; pH is not to be averaged
NEW = Parameter not established in previous operating permit

Basis for Limitations Codes:

1. State or Federal Regulation/Law
2. Water Quality Standard (includes RPA)
3. Water Quality Based Effluent Limits
4. Antidegradation Review/Policy
5. Water Quality Model
6. Best Professional Judgment
7. TMDL or Permit in lieu of TMDL
8. Benchmark based on MSGP
9. Benchmark based on Missouri Water Quality Standards

DERIVATION AND DISCUSSION OF LIMITS:

CONVENTIONAL:

Total Suspended Solids

80 mg/L as a Daily Maximum Limit. This daily maximum is retained from the previous permit for all pre-existing outfalls; the previous permit also required a 60 mg/L monthly average limit. Outfalls #008 and #009 are new to this permit, therefore the limits are new. There were 23 exceedances of this parameter in the last permit cycle combined at all outfalls; however, this value has been found to be achievable at other similar sites, and the permit writer finds no justification to raise this limit under anti-backsliding regulations. This parameter is given technology based limits in the ELG of 88 mg/L daily maximum and 27 mg/L monthly average. The technology limits are based on raw leachate and wastewater treated through biological mechanisms, and are thus not appropriate to stormwater discharges. There are no water quality standards for TSS; however, sediment discharges can negatively impact aquatic life habitat. For this reason, the general criteria found at 10 CSR 20-7.031 (4) will apply. The TSS reported at these outfalls ranged from 6 mg/L to 2,310 mg/L. 2,310 mg/L is more than 28 times the current limit, and could present a danger to aquatic life and stream aesthetics. 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, as well as clogging the gills of fish and invertebrates. Using best professional judgment and data from other industrial sites, 80 mg/L is protective of the general criteria.

In addition to the above, TSS is a valuable indicator parameter. Suspended solids may attach to other pollutant particulates. TSS monitoring allows the permittee to identify increases in TSS that may indicate uncontrolled materials leaving the site. High levels of TSS such as those reported by this facility may indicate the possibility substantial amounts of pollutants are leaving the site adsorbed to suspended solids.

Monitoring for TSS will be increased to monthly in this permit. TSS is a primary pollutant of concern at this site, and monthly monitoring will allow evaluation of BMP measures on a regular basis after a variety of precipitation events. TSS data from this site is highly variable, indicating BMPs are not regularly functioning at outfalls during precipitation events. At commingled outfalls #007, #008, and #009, monthly monitoring of TSS will also serve to evaluate any possible connection between radionuclide discharges and TSS levels in the effluent. It is the best professional judgment of the permit writer the radionuclide discharges at this site are strongly tied to TSS levels in the effluent, indicating, again, TSS is a primary pollutant of concern. A schedule of compliance is provided for outfalls #008 and #009.

OUTFALLS #003, #004, #005, #007– STORMWATER OUTFALLS

Effluent limitations derived and established in the below effluent limitations table are based on current operations of the facility. Effluent means both process water and stormwater. Any flow through the outfall is considered a discharge and must be sampled and reported as provided below. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

PARAMETERS OUTFALLS #003, #004, #005, #007	UNIT	BASIS	DAILY MAXIMUM LIMIT	BENCHMARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL								
FLOW	MGD	1	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	24 HR EST
PRECIPITATION	INCHES	6	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	MEASURE
CONVENTIONAL								
BOD_5	MG/L	6	45	-	45/30	ONCE/QUARTER	ONCE/QUARTER	GRAB
COD	MG/L	6	120	-	120/90	ONCE/QUARTER	ONCE/QUARTER	GRAB
OIL & GREASE	MG/L	1, 3	15	-	15/10	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH ǂ	SU	1, 3	6.5 TO 9.0	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLEABLE SOLIDS	mL/L/HR	6	**	1.5	1.5/1.0	ONCE/QUARTER	ONCE/QUARTER	GRAB
METALS								
TOTAL HARDNESS AS $CaCO_3$	REMOVED FROM THESE OUTFALLS							
ALUMINUM, TOTAL RECOV.	µg/L	3,6	**	750	*/*	ONCE/QUARTER	ONCE/QUARTER	GRAB
ANTIMONY, TOTAL RECOV.	µg/L	6	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
ARSENIC, TOTAL RECOV.	µg/L	6	**	33	*/*	ONCE/QUARTER	ONCE/QUARTER	GRAB
CHROMIUM (VI), DISSOLVED	µg/L	6	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
COBALT, TOTAL RECOVERABLE	REMOVED FROM THESE OUTFALLS							
COPPER, TOTAL RECOV.	µg/L	6,	**	22	*/*	ONCE/QUARTER	ONCE/QUARTER	GRAB
IRON, TOTAL RECOV.	µg/L	6	4000	-	1639/817	ONCE/QUARTER	ONCE/QUARTER	GRAB
SELENIUM, TOTAL RECOV.	µg/L	6	*	-	*/*	ONCE/QUARTER	ONCE/QUARTER	GRAB
SILVER, TOTAL RECOV.	REMOVED FROM THESE OUTFALLS							
THALLIUM, TOTAL RECOV.	µg/L	6	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
ZINC, TOTAL RECOV.	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
NUTRIENTS								
AMMONIA AS N (APR1-SEPT 30)	mg/L	6	*	-	3.7/1.4	ONCE/QUARTER	ONCE/QUARTER	GRAB
AMMONIA AS N (OCT 1-MAR 31)	mg/L	6	*	-	7.5/2.8	ONCE/QUARTER	ONCE/QUARTER	GRAB
OTHER								
BENZENE	µg/L	6	*	-	*/*	ONCE/QUARTER	ONCE/QUARTER	GRAB
EYHYLBENZENE	REMOVED FROM THESE OUTFALLS							
CHLORIDE + SULFATE	mg/L	1,6	1000	-	1000/*	ONCE/QUARTER	ONCE/QUARTER	GRAB
ELG								
A-TERPINEOL	MG/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
BENZOIC ACID	MG/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
P-CRESOL	MG/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
PHENOL	MG/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
ANNUAL METALS								
BERYLLIUM, TOTAL RECOVER.	µg/L	6	*	-	SAME	ONCE/YEAR	ONCE/YEAR	GRAB
CADMIUM, TOTAL RECOV.	µg/L	6	*	-	SAME	ONCE/YEAR	ONCE/YEAR	GRAB
CHROMIUM (III), TOTAL RECOV	µg/L	6	*	-	SAME	ONCE/YEAR	ONCE/YEAR	GRAB
LEAD, TOTAL RECOV.	µg/L	6	*	-	SAME	ONCE/YEAR	ONCE/YEAR	GRAB
MERCURY, TOT. RECOV.	µg/L	6	*	-	SAME	ONCE/YEAR	ONCE/YEAR	GRAB
NICKEL, TOTAL RECOVERABLE	µg/L	6	*	-	SAME	ONCE/YEAR	ONCE/YEAR	GRAB

SEE NOTES ON PAGE 20

NOTES:

* - Monitoring requirement only
** - Monitoring with associated benchmark
ǂ The facility will report the minimum and maximum pH values; pH is not to be averaged
NEW = Parameter not established in previous operating permit

Basis for Limitations Codes:

1. State or Federal Regulation/Law
2. Water Quality Standard (includes RPA)
3. Water Quality Based Effluent Limits
4. Antidegradation Review/Policy
5. Water Quality Model
6. Best Professional Judgment
7. TMDL or Permit in lieu of TMDL
8. Benchmark based on MSGP
9. Benchmark based on Missouri Water Quality Standards

DERIVATION AND DISCUSSION OF LIMITS OUTFALLS #003, #004, #005, #007:

PHYSICAL:

Flow
In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification. The facility will report the total flow in millions of gallons per day (MGD).

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 permittee a better understanding of specific control measure that should 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. It is not necessary to report all days of precipitation during the quarter because of the readily available on-line data.

CONVENTIONAL:

Biochemical Oxygen Demand (BOD_5)
Daily maximum limit of 45 mg/L. The previous permit required 45 mg/L daily maximum limit with a 30 mg/L monthly average limit. According to DMR data, there were multiple exceedances of this limit in the previous permit cycle: four at outfall #003 and eight at outfall #007. It is in the permit writer's best professional judgment there is no justification under backsliding to raise these limits. They have been shown to be achievable at other landfill sites, and were achievable at this site for most reporting periods. BOD is a known pollutant of concern at solid waste disposal sites, as indicated in the ELG found at 40 CFR Part 445.

Chemical Oxygen Demand (COD)
Daily maximum limit of 120 mg/L. The previous permit required 120 mg/L as a daily maximum limit and 90 mg/L as a monthly average limit. Values reported at these outfalls ranged from 5.9 mg/L to 593 mg/L, with 13 total exceedances. Outfalls 004 and 005 did not have any reported exceedances for this parameter in the last permit cycle. There are no water quality standards for COD; however, increased oxygen demand may impact instream water quality by lowering available oxygen for stream organisms. COD is also a valuable indicator parameter. COD monitoring allows the permittee to identify increases in COD that may indicate materials/chemicals coming into contact with stormwater that cause an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs. 120 mg/L COD has been shown to be feasible and achievable at other similar sites, and the permit writer can find no justification to raise or remove these limits under anti-backsliding regulations.

Oil & Grease
15 mg/L daily maximum limit. The previous permit required a 15 mg/L daily maximum limit, and a 10 mg/L monthly average limit. 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 toluene, 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 A: *Criteria for Designated Uses*; 10 mg/L is the standard for the protection of aquatic life. 10 mg/L is also the level at which sheen is estimated 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 found at 10 CSR 20-7.031 (4), it is the responsibility of the permittee to visually observe the discharge and receiving waters for sheen or bottom deposits. The daily maximum was calculated using the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001). Section 5.4.2 indicates the waste load allocation can be set to the chronic standard. When the chronic standard is multiplied by 1.5, the daily maximum can be calculated. Hence, 10 * 1.5 = 15 mg/L for the daily maximum.

Settleable Solids (SS)
Monitoring, with a daily maximum benchmark of 1.5 mL/L/hr. The previous permit required a 1.5 mL/L/hr daily maximum limit, and a 1.0 mL/L/hr monthly average limit. There were no exceedances of this parameter in the previous permit cycle. There are no water quality standards for settleable solids; however, sediment discharges can negatively impact aquatic life habitat. Increased settleable solids are known to interfere with multiple stages of the life cycle in many benthic organisms. For example, they can smother eggs and young or clog the crevasses benthic organisms use for habitat. Settleable solids are also a valuable indicator parameter. Solids monitoring allows the permittee to identify increases in sediment and solids that may indicate uncontrolled materials leaving the site. A technology based benchmark of 1.5 mL/L/hr will be implemented for this parameter. This value falls within the range of values implemented in other permits containing similar industrial activities. There is no reasonable potential for this facility to exceed limitations for this parameter, therefore anti-backsliding regulations allow the conversion of this limit to a benchmark.

METALS:
General warm-water habitat criteria apply (WWH) designated as AQL in 10 CSR 20-7.031 Table A. Additional use criterion (HHP, DWS, GRW, IRR, or LWW) may also be used as applicable to determine the most protective effluent limit for the stream class and uses.

A standard water hardness of 162 mg/L for stormwater is used in the conversion below. This value represents the 25th percentile of all watershed's in-stream hardness values throughout Missouri. Additionally, when there are no site specific translator studies, partitioning between the dissolved and absorbed phases is assumed minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the department, the department may integrate those findings into derivation of the water quality limits. Conversion factors for Cd and Pb are hardness dependent. N/A means not applicable.

METAL	CONVERSION FACTORS USING HARDNESS OF 162 MG/L	
	ACUTE	CHRONIC
Aluminum	N/A	N/A
Arsenic	1	1
Copper	0.960	0.960
Selenium	N/A	N/A
Silver	0.850	N/A

Total Hardness as $CaCO_3$
This parameter will be removed from this permit. While some metals are hardness dependent, toxicity is determined in stream, not at end of pipe. Due to the variable nature of rain events, an estimation of the receiving water body's hardness cannot be reliably determined using the "end of pipe" hardness data supplied by the permittee to determine in stream toxicity of these metals. A default hardness value of 162 mg/L will be used for stormwater in the water quality based limit calculations for metal found in this permit.

Aluminum, Total Recoverable
Monitoring with a 750 µg/L daily maximum benchmark. The previous permit required monitoring only. Aluminum is a non-ferrous metal widely used in industrial applications. It is used to manufacture beverage cans, foil, other packaging, construction materials, and other products too numerous to list. It is a common constituent of both sanitary and industrial solid waste and is a common pollutant of concern at landfills. After reviewing five years of DMR data, the permit writer noted 36 exceedances of the acute aquatic life water quality criterion. The acute water quality standard is 750 µg/L. Data from the outfalls ranged from 42 µg/L to 31,000 µg/L. A benchmark is placed on this parameter.

Antimony, Total Recoverable
Monitoring only, continued from the previous permit. The permittee reported this pollutant as believed absent on application materials received 12/28/2015. There have been no exceedances of this parameter at these outfalls in the last permit cycle. Monitoring is continued, as antimony is a pollutant of concern at landfill sites.

Arsenic, Total Recoverable
Monitoring with a 33 µg/L daily maximum benchmark. The previous permit required monitoring only for this parameter. The DMR data from these outfalls show values ranging from 10 µg/L to 70.4 µg/L. The chronic Missouri water quality standard for the protection of aquatic life for arsenic is 20 µg/L, which was exceeded once in the last permit cycle. It is the best professional judgment it is unlikely discharge of this pollutant at the reported levels during acute rain events will present an acute hazard to aquatic life or human health. The chronic standards are applicable to an exposure period of four days, which is unlikely to be reached instream during a rain event. In addition, the permittee was not consistently utilizing adequately sensitive laboratory methods for analysis of this pollutant in the previous permit cycle (see Part V, Sufficiently Sensitive Analytical Methods).

Sufficiently sensitive methods must be employed to ensure compliance with the water quality standards. Sufficiently sensitive methods are required by the standard conditions of this renewal. Because the permit writer judges there is no water quality concern at the discharge amounts reported, a benchmark is appropriate. The benchmark is set at an amount believed to be an acute value protective of aquatic life, based on calculations from guidance in the *Technical Support Document For Water Quality-based Toxic Controls* (EPA/505/2-90-001).

AQL WQS: 20 µg/L Set WQS to WLA (when no mixing considerations) = 20 µg/L
LTA_c = 20 (0.527) = 10.54 Benchmark= 10.54 (3.11) = 32.77 = **33 µg/L** [CV = 0.6, 99th Percentile]

Beryllium, Total Recoverable
Annual monitoring. Beryllium has numerous industrial uses due to its light weight and particular chemical properties, especially as an alloy. There is potential for wastes from these uses to be found at a landfill site. There have been no exceedances of this parameter at these outfalls. Beryllium is a pollutant of concern at landfills, therefore monitoring will be continued annually.

Cadmium, Total Recoverable
Annual monitoring. Cadmium has numerous industrial uses, including electroplating, paint, batteries, and metal polish, among others. There is a potential for wastes from these uses to be found at a solid waste disposal site. There have been no exceedances of this parameter at these outfalls in the previous permit cycle. Cadmium is a common pollutant of concern at landfills, therefore monitoring will be continued annually.

Chromium (III), Total Recoverable
Annual monitoring. Chromium III has several industrial uses, including chrome plating, the manufacture of dye and pigments, leather and wood preservation, and as an alloy with other metals. There is a potential for wastes from these uses to be found at a solid waste disposal site. There have been no exceedances of this parameter at these outfalls in the previous permit cycle. Annual monitoring will be required due to the varied and uncharacterized wastes accepted at landfills, and the potential for those wastes to release chromium (III).

Chromium (VI), Dissolved
Monitoring only. Chromium VI has several industrial uses, including chrome plating, the manufacture of dye and pigments, leather and wood preservation, and as an alloy with other metals. It was also historically used as "chromic acid" for a glass cleaner in industrial settings. There is a potential for wastes from these uses to be found at a solid waste disposal site. 15 µg/L is the acute water quality standard for the protection of aquatic life. DMR history at this site shows values ranging from 5 µg/L to 25 µg/L, with one value of 250 µg/L reported at outfall #005. The permittee provided DMR submission forms which verify all values above 15 µg/L were non-detect values. The permittee was not consistently utilizing adequately sensitive laboratory methods for analysis of this pollutant in the previous permit cycle (see Part V, Sufficiently Sensitive Analytical Methods), therefore monitoring will be continued to ascertain the amount of chromium (VI) in the effluent. Sufficiently sensitive analytical methods are required by the standard conditions of this renewal.

Cobalt, Total Recoverable
Monitoring is removed from these outfalls. The permittee reported this pollutant as believed present on application materials received 12/28/2015; however, all values reported for this pollutant are very low. They range from a non-detect at 2.0 µg/L up to 25.1 µg/L. Cobalt does not have water quality standards for human health or protection of aquatic life. The Livestock watering water quality standard is 1000 µg/L. There have been no exceedances of this standard at this outfall in the last reporting period. It is in the best professional judgment of the permit writer to remove this pollutant from monitoring.

Copper, Total Recoverable
Monitoring, with a daily maximum benchmark of 22 µg/L. The previous permit required monitoring only. Copper has numerous industrial uses, from alloys and antimicrobial applications, to wires, cables and paints. It is used as a stabilizing agent in chemical products. DMR history at this site shows values ranging from 2.0 µg/L to 64.8 µg/L. A benchmark is placed on this parameter. Benchmarks require the permittee to adapt BMPs as necessary to meet the benchmark targets over time.

Acute AQL WQS:	$e^{(0.9422 * \ln 162 - 1.7003)} * 0.960 = 21.163$	[at Hardness 162]
Acute TR WQS:	21.163 ÷ 0.96 = 22.048	[Total Recoverable Conversion]
Acute WLA:	C_e = 22.048	[WLA=WQS when no mixing]

Daily maximum benchmark: 22 µg/L

Iron, Total Recoverable
Daily maximum limit set at 4000 µg/L. The previous permit required 1639 µg/L as a daily maximum, and a monthly average of 817 µg/L. The increase on limits on this parameter is valid under anti-backsliding regulations due to new information which impacts the validity of the previously assigned limitations. Due to the sporadic nature of stormwater discharges, the Department has determined chronic standards are capricious measures of stormwater discharges. Chronic effluent limitations are based on the

organism's ability to survive within the designated concentration for four days. Stormwater is rarely discharged continuously for four days. Conversely, acute water quality standards are applicable, but are non-existent for iron. It is in the best professional judgment of the permit writer a discharge from this outfall at 4000 µg/L per storm event is unlikely to cause an exceedance of the chronic water quality standard of 1000 µg/L over four days. After reviewing other sources of data and studies, it is in the permit writer's best professional judgment to require a 4000 µg/L daily maximum limit for this facility. In accordance with the department's current stormwater permitting, under the direction of EPA guidance, it is the permit writer's best professional judgment an iron limit of 4000 µg/L is protective of water quality at this facility.

After reviewing five years of DMR data, fifteen exceedances of 4000 µg/L were noted, along with numerous exceedances of the chronic criteria of 1000 µg/L; therefore a limit is required for this parameter under 40 CFR Part 122.44 (d) iii: "When the permitting authority determines, using the procedures in paragraph (d)(1)(ii) of this section, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant." In addition, aquatic life is protected by the general criteria found at 10 CSR 20-7.031(4), which state, "Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life." With iron values as high as 48,200 µg/L, harm to aquatic life is possible acutely, therefore a limit is necessary to protect water quality. A schedule of compliance will not be provided to meet this limit, as it is higher than the previous limits on these outfalls.

Source:
Birge, W.J., Black, J.A., Westerman, A.G., Short, T.M., Taylor, S.B., Bruser, D.M. and Wallingford, E.D. 1985 *Recommendations on Numerical Values for Regulating Iron and Chloride Concentrations for the Purpose of Protecting Warmwater Species of Aquatic Life in the Commonwealth of Kentucky.* Memorandum of Agreement No. 5429, Kentucky Natural Resources and Environmental Protection Cabinet.

Lead, Total Recoverable
Annual monitoring. There were no exceedances of water quality standards during the previous permit cycle for this parameter. Lead has numerous industrial uses, including batteries, as an alloy, solder, a coolant, in electronics, and others. Lead is a common pollutant of concern at sanitary waste disposal sites; therefore, annual monitoring will continue for this pollutant.

Mercury, Total Recoverable
Annual monitoring. Mercury is used industrially for the manufacture of chemicals, in fluorescent lights, and in electronics. There is a potential for wastes from these uses to be found at a solid waste disposal site. There have been no exceedances of this parameter at these outfalls. Annual monitoring will be required due to the varied and uncharacterized wastes accepted at landfills, and the potential for those wastes to release mercury.

Nickel, Total Recoverable
Annual monitoring. Nickel is primarily used as an alloy with other metals. It can be found in magnets, rechargeable batteries, and as an anti-corrosive coating. There is a potential for wastes from these uses to be found at a solid waste disposal site. There have been no exceedances of this parameter at these outfalls. Annual monitoring will be required due to the varied and uncharacterized wastes accepted at landfills, and the potential for those wastes to release nickel.

Selenium, Total Recoverable
Monitoring only, continued from the previous permit. The previous permit required monitoring only. Five years of DMR data were reviewed by the permit writer. The permittee was not utilizing adequately sensitive laboratory methods for analysis of this pollutant in the previous permit cycle (see Part V, Sufficiently Sensitive Analytical Methods). Sufficiently sensitive analytical methods are required under the standard conditions of this renewal. Because the data is unclear, reasonable potential for exceeding the water quality standard instream is unclear, therefore continued quarterly monitoring is required. The permittee must use methods sufficiently sensitive to show compliance with the water quality standard of 5 µg/L.

Silver, Total Recoverable
Monitoring is removed from these outfalls. There have been no exceedances of this parameter at these outfalls, and all reported DMR data is non-detect. Additionally, this pollutant is reported believed absent by the permittee at all outfalls on application materials received 12/28/2015. The permit writer removes this parameter from monitoring for these reasons.

Thallium, Total Recoverable
Monitoring only, continued from the previous permit. Thallium was routinely used as a rat poison and an ant killer in the United States until around 1972, but current uses are primarily in optics and electronics. There is a potential for wastes from these uses to be found at a solid waste disposal site. After reviewing DMR data for these outfalls, it was noted reported levels of this pollutant were above the human health water quality standard of 6.3 µg/L. Data ranged from 20 µg/L to 50 µg/L; however the permittee provided DMR sheets showing these values were non-detect values. Non-detect values higher than the water quality standard mean the facility was not using sufficiently sensitive methods (see Part V, Sufficiently sensitive analytical methods, for more

information). Sufficiently sensitive methods are required to ensure compliance, and required under the standard conditions of this renewal. Because the permittee was not utilizing sufficiently sensitive methods the actual levels of thallium in the effluent at this outfall in the previous permit cycle are not known. It is in the best professional judgment of the permit writer to continue quarterly monitoring for this parameter in the effluent for this reason.

Zinc, Total Recoverable
Monitoring only, continued from the previous permit. Zinc has numerous industrial applications, the most prevalent of which are batteries and anti-corrosion agents. It is also commonly used as an alloy and in industrial chemical compounds such as flame retardants and wood preservatives. It can also be found in agricultural fungicides. Zinc is a common pollutant of concern at solid waste landfills as identified in the ELG found at 40 CFR Part 445; therefore, monitoring will be continued quarterly.

NUTRIENTS:

Ammonia, Total as Nitrogen
Monitoring only. The previous permit required two seasons of limitations for ammonia: April 1-September 30—Daily maximum limit of 3.7 mg/L and a monthly average limit of 1.4 mg/L; and October 1-March 31—Daily maximum limit of 7.5 mg/L and a monthly average limit of 2.8 mg/L. There were no exceedances of the limits in the previous permit cycle. After review of five years of DMR data, it is the professional judgment of the permit writer this facility does not have the potential to cause or contribute to an excursion from the water quality standard for ammonia in the receiving waterbody, therefore, anti-backsliding regulations allow removing the limits on this parameter. Ammonia is a primary component of leachate and is found in the ELG for this industry; therefore, the permit writer determines this parameter is important to continue monitoring at this site, especially given the number of leachate outbreaks recorded.

OTHER:

Benzene
Monitoring only, continued from the previous permit. Quarterly monitoring is continued on this parameter using the best professional judgment of the permit writer. Benzene is a volatile organic compound and a common component of many fuel and oil products. It is used as an intermediate in the production of numerous other chemicals, especially phenols and acetones. Benzene is a reliable indicator pollutant for hydrocarbon pollutants in the volatile fraction, such as ethylbenzene, toluene, and xylene. Continuing monitoring for this pollutant will aid in indication of other hydrocarbon issues at the site.

Chloride + Sulfate
1000 mg/L daily maximum limit, continued from the previous permit. After reviewing five years of DMR history for this facility, an exceedance of this limit was observed at outfall #007. To protect aquatic life in the receiving stream under 10 CSR 20-7.031 (4)(D), which states, "Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal, or aquatic life." The limit is retained per 10 CSR 20-7.031(4)(L)1 (2012 rule version, the 2014 rule version was not accepted by EPA).

Ethylbenzene
Monitoring is removed from these outfalls. Benzene will substitute for quarterly monitoring of this pollutant at this site, as benzene and ethylbenzene are commonly discharged from the same source, and discharge of benzene indicates probable discharge of ethylbenzene. If, after review of DMR data, this site is found to be discharging benzene in amounts of concern, other petroleum components may be added to the sampling parameters in this permit.

ELG:

α-Terpineol, Benzoic Acid, p-Cresol, Phenol
These parameters are new to this permit and are added using the permit writer's best professional judgment. They are all found in the ELG for the landfill industry found at 40 CFR Part 445. They are common components of leachate and would indicate leachate contamination if found in the stormwater effluent. The leachate outbreaks Bridgeton number considerably more than other solid waste facilities; this is partially caused by the subsurface smoldering event causing structural damage because of increased heat generation. The permit writer determines the addition of ELG parameters to this permit is necessary to ensure leachate is managed properly and stormwater structures are clear of leachate contamination. It is a violation of this permit to discharge wastewater. Per 40 CFR Part 445.2, contaminated stormwater is considered a wastewater.

OUTFALLS #008 AND #009– NEW STORMWATER OUTFALLS

Effluent limitations derived and established in the below effluent limitations table are based on current operations of the facility. Effluent means both process water and stormwater. Any flow through the outfall is considered a discharge and must be sampled and reported as provided below. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

PARAMETERS OUTFALL #008, #009	UNIT	BASIS	DAILY MAXIMUM LIMIT	BENCHMARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL								
FLOW	MGD	1	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	24 HR. EST
PRECIPITATION	INCHES	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	24 HR. TOT
CONVENTIONAL								
BOD_5	MG/L	6	45	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
COD	MG/L	6	120	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
OIL & GREASE	MG/L	1, 3	15	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH ǂ	SU	1, 3	6.5 TO 9.0	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLEABLE SOLIDS	ML/L/HR	6	**	1.5	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
METALS								
ALUMINUM, TOTAL RECOV.	µg/L	6	**	750	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
ANTIMONY, TOTAL RECOV.	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
ARSENIC, TOTAL RECOVER.	µg/L	6	*	33	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
BERYLLIUM, TOTAL RECOVER.	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
CADMIUM, TOTAL RECOVER.	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
CHROMIUM (III), TOTAL REC.	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
CHROMIUM (VI), DISSOLVED	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
COBALT, TOTAL RECOVERABLE	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
COPPER, TOTAL RECOVER.	µg/L	6,	*	22	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
IRON, TOTAL RECOVERABLE	µg/L	6	4000	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
LEAD, TOTAL RECOVERABLE	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
MERCURY, TOT. RECOV.	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
NICKEL, TOTAL RECOVERABLE	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
SELENIUM, TOTAL RECOVER	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
THALLIUM, TOTAL RECOVER	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
ZINC, TOTAL RECOVERABLE	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
NUTRIENTS								
AMMONIA AS N	mg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
OTHER								
CHLORIDE + SULFATE	mg/L	6	1000	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
BENZENE	µg/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
ELG								
A-TERPINEOL	MG/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
BENZOIC ACID	MG/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
P-CRESOL	MG/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
PHENOL	MG/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB

NOTES:

* - Monitoring requirement only
** - Monitoring with associated benchmark
ǂ The facility will report the minimum and maximum pH values; pH is not to be averaged
NEW = Parameter not established in previous operating permit

Basis for Limitations Codes:

1. State or Federal Regulation/Law
2. Water Quality Standard (includes RPA)
3. Water Quality Based Effluent Limits
4. Antidegradation Review/Policy
5. Water Quality Model
6. Best Professional Judgment
7. TMDL or Permit in lieu of TMDL
8. Benchmark based on MSGP
9. Benchmark based on Missouri Water Quality Standards

DERIVATION AND DISCUSSION OF LIMITS, OUTFALL #008:

Outfall #008 and #009 are newly established outfalls for this permit. Reasonable potential was not able to be determined for pollutants discharging from this outfall, and sample data was not provided to the permit writer. For outfall #008, the application did not disclose sample data for BOD, COD, TSS, SS, or Ammonia. Oil and Grease was noted to be believed present, as were sulfate, aluminum, arsenic, beryllium, cadmium, chromium (III), chromium (VI), cobalt, copper, iron, lead, mercury, nickel, selenium, and zinc. Silver and thallium were noted as believed absent. Thallium was added to these outfalls for sampling using the permit writer's best professional judgment after analyzing discharges from other outfalls. Sufficiently sensitive methods were not used for this parameter in the previous permit cycle to determine whether the discharges contained thallium below water quality standards. Silver was not added, previous DMR data indicates this is not a pollutant of concern at this site. All parameters are new to this permit as these are new outfalls. Limits and benchmarks were added to these outfalls to match existing outfalls, as it is believed all outfalls receive similar pollutants of concern and discharge similar effluent. A two year schedule of compliance is provided at these outfalls to ensure BMP measures can meet the established limits. Please see justifications for outfalls #003through #007 for more information on the specific parameters below.

PHYSICAL:

Flow
In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification. The facility will report the total flow in millions of gallons per day (MGD).

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 permittee a better understanding of specific control measures that should 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. It is not necessary to report all days of precipitation during the quarter because of the readily available on-line data.

CONVENTIONAL:

Biochemical Oxygen Demand (BOD_5)
Daily maximum limit 45 mg/L. BOD is a known pollutant of concern at solid waste disposal sites, as indicated in the ELG, and the DMR data of other outfalls have indicated this is a pollutant of concern at this site in particular.

Chemical Oxygen Demand (COD)
Daily maximum limit of 120 mg/L. DMR data from other outfalls at this site have indicated this is a pollutant of concern.

Oil & Grease
Daily maximum limit of 15 mg/L. DMR data from other outfalls at this site have indicated this is a pollutant of concern.

Settleable Solids (SS)
Monitoring, with a daily maximum benchmark of 1.5 mL/L/hr. It is in the professional judgment of the permit writer to require monitoring of this pollutant for a permit cycle with a benchmark matching the benchmark found on the other outfalls at this site. This is a technology based benchmark and is believed to be achievable at this site based on DMR data from other outfalls.

METALS:

Aluminum, Total Recoverable
Monitoring with a 750 µg/L daily maximum benchmark. DMR data from other outfalls have indicated this is a pollutant of concern at this site. It is in the professional judgment of the permit writer to require monitoring of this pollutant with a benchmark as is found on the other outfalls at this site. Due to the number of exceedances of aquatic life water quality standards at other outfalls, it is in the best professional judgment of the permit writer a benchmark is more appropriate for this outfall than monitoring only. 750 µg/L is a technology benchmark found to be feasible in stormwater at other industrial sites.

Antimony, Total Recoverable
Monitoring only. Antimony can possibly be found in the solid waste stream accepted by landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant until reasonable potential for this outfall to release antimony can be determined.

Arsenic, Total Recoverable
Monitoring, with a 33 µg/L daily maximum benchmark. DMR data from other outfalls have suggested this is a pollutant of concern at this site. This determination was made based on the DMR data at other outfalls. A benchmark is included to evaluate BMP technology performance.

Beryllium, Total Recoverable
Monitoring only. Beryllium is a common pollutant of concern at landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant.

Cadmium, Total Recoverable
Monitoring only. Cadmium is a common pollutant of concern at landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant.

Chromium (III), Total Recoverable
Monitoring only. DMR data from other outfalls have suggested this is not a pollutant of concern at this site; however, chromium (III) can possibly be found in the solid waste stream accepted by landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant until reasonable potential for this outfall to release chromium (III) can be determined.

Chromium (VI), Dissolved
Monitoring only. Chromium (VI) is a common pollutant of concern at landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant.

Cobalt, Total Recoverable
Monitoring only. DMR data from other outfalls have suggested this is not a pollutant of concern at this site; however, cobalt can possibly be found in the solid waste stream accepted by landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant until reasonable potential for this outfall to release cobalt can be determined.

Copper, Total Recoverable
Monitoring, with a 22 µg/L benchmark. DMR data from other outfalls have suggested this is a pollutant of concern at this site.. This determination was made based on the DMR data at other outfalls. Copper was not consistently released in large quantities at all outfalls, therefore monitoring with a benchmark is appropriate to determine the proper BMP measures at each outfall.

Iron, Total Recoverable
Daily maximum limit of 4000 µg/L. This limit is set to match the established outfalls at this site.

Lead, Total Recoverable
Monitoring only. Lead is a common pollutant of concern at landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant.

Mercury, Total Recoverable
Monitoring only. DMR data from other outfalls have suggested this is not a pollutant of concern at this site; however, mercury can possibly be found in the solid waste stream accepted by landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant until reasonable potential for this outfall to release mercury can be determined.

Nickel, Total Recoverable
Monitoring only. DMR data from other outfalls have suggested this is not a pollutant of concern at this site; however, nickel can possibly be found in the solid waste stream accepted by landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant until reasonable potential for this outfall to release nickel can be determined.

Selenium, Total Recoverable
Monitoring only. DMR data from other outfalls have suggested this is a pollutant of concern at this site. This determination was made based on the DMR data at other outfalls. Selenium was not consistently released in large quantities at all outfalls, therefore monitoring only will determine the likelihood at this outfall specifically. Due to possible analysis detection limit issues, the permit writer determines limits are not appropriate at this time. Additional data collected with sufficiently sensitive methods will allow reasonable potential to be determined.

Thallium, Total Recoverable
Monitoring only. DMR data from other outfalls is unclear whether this is a pollutant of concern at this site. The methods used to test for thallium in previous permit cycles were not sufficiently sensitive. Due to levels of this pollutant possibly being above the water quality standards, the permit writer determines monitoring is appropriate at this time.

Zinc, Total Recoverable
Monitoring only. Zinc is a common pollutant of concern at landfills as identified in the ELG. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant.

NUTRIENTS:

Ammonia, Total as Nitrogen
Monitoring only. Ammonia is a common pollutant of concern at landfills as identified in the ELG. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant.

OTHER:

Benzene
Monitoring only. Benzene is a common pollutant of concern at landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring for this pollutant. Benzene is a reliable indicator pollutant for hydrocarbon pollutants in the volatile fraction, such as ethylbenzene, toluene, and xylene.

Chloride + Sulfate
1000 mg/L daily maximum limit. Chloride and sulfate are common pollutants of concern at landfills. It is in the best professional judgment of the permit writer to include quarterly monitoring and a limit to match the other established outfalls for these combined pollutants. 10 CSR 20-7.031 limits the combined amounts of these pollutants to 1000 µg/L.

ELG:

α-Terpineol, Benzoic Acid, p-Cresol, Phenol
These parameters are new to this permit and are added using the permit writer's best professional judgment. They are all found in the ELG for the landfill industry found at 40 CFR Part 445. They are common components of leachate and would indicate leachate contamination if found in the stormwater effluent. The leachate outbreaks Bridgeton number considerably more than other solid waste facilities. This is partially caused by the subsurface smoldering event, which is causing structural damage because of increased heat generation. The permit writer determines the addition of ELG parameters to this permit is necessary to ensure leachate is managed properly and stormwater structures are clear of leachate contamination. It is a violation of this permit to discharge wastewater. Per 40 CFR Part 445.2, contaminated stormwater is considered a wastewater.

OUTFALLS #007, #008, AND #009—STORMWATER OUTFALLS WITH WEST LAKE IMPACT

Effluent limitations derived and established in the below effluent limitations table are based on current operations of the facility. Effluent means both process water and stormwater. Any flow through the outfall is considered a discharge and must be sampled and reported as provided below. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

PARAMETERS OUTFALL #007, 008, #009	UNIT	BASIS	DAILY MAXIMUM LIMIT	BENCHMARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
METALS								
BARIUM, TOTAL RECOVERABLE	µG/L	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
RADIONUCLIDES								
GROSS ALPHA	PCI/L	6	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
BETA PARTICLE AND PHOTON RADIOACTIVITY (GROSS BETA)	PCI/L	6	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
BETA PARTICLE AND PHOTON RADIOACTIVITY (GROSS BETA)	MREM	6	*	-	NEW	±	±	CALCULATED
RADIUM, TOTAL	PCI/L	6	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
RADIUM-226	PCI/L	6	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
RADIUM-228	PCI/L	6	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
THORIUM-230	PCI/L	6	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
THORIUM-232	PCI/L	6	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
URANIUM, TOTAL	µG/L	6	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB

NOTES:

* - Monitoring requirement only
** - Monitoring with associated benchmark
*** - see fact sheet below for information on conditional monitoring and reporting or permit page #9, Note "±"
ǂ - The facility will report the minimum and maximum pH values; pH is not to be averaged
NEW - Parameter not established in previous operating permit
± - For any monthly sample result for Beta Particle and Photon Radioactivity greater than 50 pCi/L, the radiation dose shall be calculated in millirem/year and submitted to the Department. In addition to the laboratory sheets for this parameter, the data and calculations used to total the millirem/year will be submitted as an attachment. The calculated results and the attachment will be submitted on the 28th day of the month following the monthly sample. If the monthly sample result is less than 50 pCi/L, millirem/year does not need to be calculated or reported.

Basis for Limitations Codes:

1. State or Federal Regulation/Law
2. Water Quality Standard (includes RPA)
3. Water Quality Based Effluent Limits
4. Antidegradation Review/Policy
5. Water Quality Model
6. Best Professional Judgment
7. TMDL or Permit in lieu of TMDL
8. Benchmark based on MSGP
9. Benchmark based on Missouri Water Quality Standards

DERIVATION AND DISCUSSION OF LIMITS, OUTFALLS #007, #008, AND #009:

METALS:

Barium

Quarterly monitoring only. This is a new parameter in this permit. The reported contaminant at West Lake Landfill Operable Unit 1, per the EPA, is leached barium-sulfate residues. These outfalls receive stormwater runoff from West Lake Landfill Operable Unit 1. It is in the best professional judgment of the permit writer to include monitoring for this pollutant to assess the concentration of the pollutant in the discharge from the facility. There is no aquatic life or human health water quality standard for barium in Missouri; however, it has a 2000 µg/L limit for protection of drinking water and groundwater uses.

RADIONUCLIDES:

Radionuclides have been sampled in the West Lake Landfill and vicinity. Samples have been taken by EPA, DNR, DHSS, non-governmental groups, and private organizations. For the purposes of this permit, the data referenced is that of DNR (West Lake Landfill Final Vicinity Report, dated April 1, 2016), and EPA (Standard Level IV Report of Analysis from Eberline Analytical/Oakridge Laboratory, dated 04/13/2016, and Stormwater monitoring plan results from EPA). Results of this sampling indicate radiologically-impacted material on the surface of West Lake Landfill Operable Unit 1. These three outfalls receive stormwater runoff from West Lake Landfill Operable Unit 1. Limited water quality data are available on stormwater runoff from Operable Unit 1 of West Lake Landfill at this time. Stormwater samples, overseen by EPA, collected in the watershed of these outfalls show detectable amounts of radionuclides. Additionally, sediments in the watershed area of these outfalls have been sampled which show elevated radionuclides, although the direct impact of radiologically-impacted sediment on stormwater runoff is not clear. Discharges of radioactive materials must be in compliance with 10 CSR 60-4.060. Monitoring is required to assess the concentration of the pollutant in the discharge from the facility.

Gross Alpha
Monitoring only. This is a new parameter in this permit. Gross alpha is a test that is performed to measure the overall alpha radioactivity in a water sample. Radioactive elements emit alpha particles as they decay. Per 10 CSR 60-4.060, the maximum contaminant level for gross alpha particle activity (including radium-226, but excluding radon and uranium) is 15 pCi/L. Monitoring is required to assess the concentration of the pollutant in the discharge from the facility.

Beta Particle and Photon Radioactivity (Gross Beta)
Monitoring only. This is a new parameter in this permit. Gross beta is a test that is performed to measure the overall beta radioactivity in a water sample. Radioactive elements emit beta particles as they decay. Per 10 CSR 60-4.060, the maximum contaminant level for beta particle and photon activity is 4 millirem/year. Of the man-made beta emitters regulated by 10 CSR 60-4.060, only Tritium is currently known to be discharged in the landfill leachate. Per 10 CSR 60-4.060 Table A, the activity concentration of Tritium that equates to 4 mrem dose per year would equal 20,000 pCi/L. Monitoring of Gross Beta is required to assess the concentration of the pollutant in the discharge from the facility. Results will be reported in pCi/L, unless the sample result is greater than 50 pCi/L. In this instance, the radiation does will be calculated as required by 10 CSR 60-4.060(1)(C)(2); total dose of all present beta emitters in millirem/year. See note 1 in permit for more information.

Radium-226
Monitoring only. This is a new parameter in this permit. Radium-226 is a known pollutant of concern at the West Lake site, and is monitored for under the EPA Stormwater Monitoring plan. Monitoring is required to assess the concentration of the pollutant in the discharge from these outfalls. Compliance with 10 CSR 60-4.060 requires Radium-226 + Radium-228 to total less than 5 pCI/L.

Radium-228
Monitoring only. This is a new parameter in this permit. Radium-228 is a known pollutant of concern at the West Lake site, and is monitored for under the EPA Stormwater Monitoring plan. Monitoring is required to assess the concentration of the pollutant in the discharge from these outfalls. Compliance with 10 CSR 60-4.060 requires Radium-226 + Radium-228 to total less than 5 pCI/L.

Radium-226 + Radium-228
Monitoring only. This is a new parameter in this permit. This is a reporting requirement, and requires the total of Radium-226 and Radium-228 to be reported on DMRs. Per 10 CSR 60-4.060, the maximum contaminant level for combined radium-226 and radium-228 is 5 pCi/L.

Uranium, Total
Monitoring only. This is a new parameter in this permit. Uranium is a known pollutant of concern at the West Lake Site and is monitored for under the EPA Stormwater Monitoring plan. Monitoring is required to assess the concentration of the pollutant in the discharge from these outfalls. Per 10 CSR 60-4.060, the maximum contaminant level for Total Uranium is 30 µg/L.

Thorium-230
Monitoring only. This is a new parameter in this permit. Thorium has multiple radioactive species. This isotope will be monitored for if radionuclides are found in the sample above the water quality standards.

Thorium-232
Monitoring only. This is a new parameter in this permit. Speciation of thorium in the effluent can help determine the cause of the increased radioactivity in the sample.

Part V. SAMPLING AND REPORTING REQUIREMENTS:

Refer to each outfall's derivation and discussion of limits section to review individual sampling and reporting frequencies and sampling type.

ELECTRONIC DISCHARGE MONITORING REPORT (EDMR) SUBMISSION SYSTEM:

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

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

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

- ✓ The permittee/facility is not currently using the eDMR data reporting system. The permittee shall submit an eDMR Permit Holder and Certifier Registration form within **90 days** of the effective date of this permit.

SAMPLING FREQUENCY JUSTIFICATION:

Sampling and reporting frequency was generally retained from previous permit. Similar permits have quarterly monitoring and reporting and the department has concluded quarterly sampling of stormwater to be protective of in-stream water quality for most facilities. Some parameters were reduced to yearly monitoring because they showed little reasonable potential to exceed water quality standards although complete removal of the parameters is not warranted. The permit writer has followed the USEPA Robert Periscape memorandum and guidance dated April 19, 1996 to decrease the sampling frequency to the minimum allowed under 40 CFR 122.44(i)(2). Outfall #008 parameters were established as quarterly parameters to match the other outfalls at this site. Sampling frequency for stormwater-only outfalls is typically quarterly even though BMP inspection occurs monthly. The facility may sample more frequently if they need additional data to determine if their best management technology is performing as expected.

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 should have 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, and volatile organic samples

Part VI. ADMINISTRATIVE REQUIREMENTS

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

PERMIT SYNCHRONIZATION:

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. http://dnr.mo.gov/env/wpp/cpp/docs/watershed-based-management.pdf. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than three years old, that data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit.

✓ *This permit will become synchronized by expiring at the end of the 3rd quarter, 2020.*

PUBLIC NOTICE:

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

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

☒ - The Public Notice period for this operating permit was from 06/09/2017 to 11/13/2017. Responses to the Public Notice of this operating permit warrant the modification of effluent limits and/or the terms and conditions of this permit.

The following changes were made to the permit in response to public comment:

- Outfall #009 was added
- Monthly radionuclide monitoring was implemented for outfalls #007, #008, and #009:
- Barium monitoring was added to outfalls #007, #008, and #009 with quarterly frequency
- Benchmarks and limits at outfalls #008 and #009 were changed to match those of the other outfalls:
    - TSS limit of 80 mg/L added
    - BOD limit of 45 mg/L added
    - COD limit of 120mg/L added
    - Oil & Grease limit of 15 mg/L added
    - Arsenic benchmark of 33 µg/L added
    - Iron limit of 4000 µg/L added
    - Chloride & Sulfate limit of 1000 mg/L added
- Total suspended solids monitoring was increased to monthly for all outfalls
- All references to “subsurface event” have been replaced with “subsurface smoldering event”
- Special Condition #17 was added to require the permittee to submit laboratory reports with discharge monitoring results.

The following are the Department’s responses to comments received during the public notice period.

Definitions:

Contaminated storm water means storm water which comes in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater.

Landfill wastewater means all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated storm water, contaminated ground water, and wastewater from recovery pumping wells.

Non-contaminated storm water means storm water which does not come in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater.

Comments/Responses:

Comment #1: *Please hold a public hearing for the draft stormwater permit, #MO-0112771.*

Response: A public hearing was held by the Department October 11th, 2017 at 5:30 p.m., at the Bridgeton Recreation Center. Additional public comments were collected during this meeting and the public comment period was extended to November 13, 2017.

Comment #2: *The permit fails to address radionuclides, which are a pollutant of concern associated with the West Lake Landfill. Discharge from the West Lake Landfill commingles with the discharge from Bridgeton Landfill therefore the pollutants of concern should be monitored monthly in the stormwater discharges of Bridgeton Landfill. As the delegated authority to implement and enforce the National Pollution Discharge Elimination System (NPDES) permitting program in the State of Missouri, the Department clearly has the authority to regulate radioactive materials in stormwater permits, and historic testing for radioactivity in stormwater at the site is significantly lacking.*

Response: Monthly radionuclide monitoring has been added at outfalls #007 and #008 which discharge stormwater originating from portions of Areas 1 and 2 of Operable Unit 1. In addition to existing and proposed discharges in the public notice draft, a new outfall, #009, has been added to the permit, which also includes monitoring for radionuclides.

Comment #3: *Limits should be required on radionuclide discharges in the permit.*

Response: Title 40 of the Code of Federal Regulations Part 122.44(d) requires limitations for all pollutants which the Department determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality. Existing data for the outfalls proposed in the permit show the discharges do not cause, or have reasonable potential to cause, or contribute to an excursion above state water quality standards for radionuclides. However, as noted in the previous comment response, monitoring and data reporting for radionuclides will be required at outfalls #007, #008 and #009. Under Special Condition #5, the permittee is required to register for electronic reporting within 90 days. Once enrolled, all monitoring data required by the permit will be publically accessible through the U.S. Environmental Protection Agency's Enforcement and Compliance History Online at https://echo.epa.gov/ .

Comment #4: *Monitoring should be done in the receiving tributaries and streams to see if they are contaminated by radioactive runoff from the landfill.*

Response: Existing data for the outfalls proposed in the draft show the discharges do not cause, or have reasonable potential to cause, or contribute to an excursion above state water quality standards for radionuclides. Further, of the existing data for the proposed outfalls, no sample has exceeded the water quality standards for radionuclides. At this time, although monitoring requirements at outfalls #007, #008 and #009 have been added, additional monitoring in the receiving waterbodies is not supported.

Comment #5: *Leachate spills are not addressed by the draft permit. Will any contaminated runoff be treated and removed from the site through the same treatment protocols as leachate?*

Response: The discharge of landfill wastewater or contaminated stormwater to waters of the state is not authorized by this permit. These wastewaters must be managed in accordance with the provisions contained in the Landfill Operating Permit and Missouri Solid Waste Management Law and regulations; and Hazardous Waste Program (if applicable). Bridgeton Landfill has an onsite wastewater treatment facility for treating these waste streams prior to final treatment at Metropolitan St. Louis Sewer District (MSD) – Bissell Point Plant.

Comment #6: *The permit does not adequately address whether the Bridgeton Landfill will be penalized if they are found in violation of releasing contaminated runoff.*

Response: Discharging contaminated stormwater is a violation of this permit. The discharge of non-contaminated stormwater which does not meet effluent limitations listed in this permit, is also a violation. Both actions are subject to enforcement by the Department.

Comment #7: *The permit doesn't adequately address remediation of the radionuclide contamination at the site.*

Response: This comment is outside the scope of the permit. The permit authorizes discharge of non-contaminated stormwater from the Bridgeton Landfill. Remedial actions and discharges from Areas 1 & 2 of Operable Unit 1 are handled under the authority of the EPA's Superfund Program.

Comment #8: *The radioactively impacted materials (RIM) should be excavated to ensure water safety and to correct contamination issues.*

Response: This is outside the scope of the permit. See response to Comment #7.

Comment #9: *The permit does not adequately address radioactive waste being discharged offsite, including into the sewer system and the drinking water supply.*

Response: The permit regulates discharges of non-contaminated stormwater to waters of the state and is protective of the designated uses. Monthly radionuclide monitoring has been added at outfalls #007, #008 and #009 which discharge stormwater originating from portions of Areas 1 and 2 of Operable Unit 1. Existing data for the outfalls proposed in the permit show the discharges do not cause, or have reasonable potential to cause, or contribute to an excursion above state water quality standards for radionuclides. Other non-water quality related issues are outside the scope of the permit.

Comment #10: *The draft permit does not address the April 30th, 2017 historic precipitation and subsequent runoff event, which was sampled by the Department and showed an exceedance of the Gross Alpha parameter.*

Response: The discharge which occurred on April 30th, 2017 flowed outside of the exterior fence on the northeast boundary of Operable Unit 1, Area 1 of the West Lake Landfill, not from an existing or proposed outfall under the permit. Discharges from Operable Unit 1, Area 1 are under the authority of EPA Superfund Program. The information collected by the Department was shared with EPA and the potentially responsible parties (PRPs) who responded to the event by upgrading best management practices (BMPs) and engineering controls in proximity to the discharge. For more information on this event please see the report at https://dnr.mo.gov/bridgeton/docs/2017-08-16-west-lake-landfill-stormwater.pdf

Comment #11: *The West Lake Superfund Site has contaminants in air and water moving off-site. In addition, the Superfund area and surrounding areas have never been thoroughly sampled and analyzed for further contaminants (both radiological and non-radiological contaminants of concern).*

Response: This is outside the scope of the permit. See response to Comment #7.

Comment #12: *Commenter suggests toxins from West Lake can be cycled from the water inexpensively with plants, in a process called phytoremediation. Commenter also suggests vegetated buffer zones be utilized to treat toxins.*

Response: The Department appreciates the recommendation. A phytoremediation system is not being applied at this site.

Comment #13: *Impact on the wildlife population in the area needs to be carefully evaluated before proceeding with the renewal.*

Response: Where applicable, the permit contains numeric effluent limitations for those pollutants in the discharge that cause, or have reasonable potential to cause, or contribute to an excursion above state water quality standards. Missouri's water quality standards include use designation and criteria for the protection of livestock and wildlife.

Comment #14: *The permit should be denied.*

Response: The Department's responsibility is to protect waters of state and their designated uses through the administration of state and federal environmental laws and regulations. As required by state law, the Department must promptly review site-specific permit applications for compliance with laws and regulations and if met, issue the permit.

Comment #15: *The commenter requests the Department review the Weldon Spring permit for consideration of suitable treatment of radioactive contaminants before release to Missouri watersheds. Historic permit conditions required monitoring of radioactive materials in stormwater at this site. The Weldon Spring permit shows the Department has the authority to regulate radionuclides in stormwater.*

Response: Monthly radionuclide monitoring has been added at outfalls #007, #008 and #009 of the permit to assess the need for future control or treatment of the discharges. The Department is familiar with the treatment utilized at the Weldon Spring Site, but avers that these systems were necessary due to the higher levels of radionuclides in the leachate and leachate-impacted groundwater being collected and treated at the Weldon Spring Site.

Comment #16: *Volatile organic compounds (VOCs), toluene, benzene, radon gas, and radionuclides can vent out to the public, which is a possible contaminated air exposure for the public. This venting could also occur during the transport of treated leachate to MSD.*

Response: This comment is outside the scope of the permit.

Comment #17: *The permit does not address pollutants in groundwater, also known as OU-3. Barium, nickel, benzene, toluene, radionuclides, VOCs, and other contaminants of concern are found in wells on site in groundwater monitoring reports.*

Response: Groundwater at this site is under the authority of EPA Superfund, and is designated as OU-3. Further, the Solid Waste Management Program (SWMP) is the lead program for the Department on all aspects of groundwater studies, monitoring, and remediation associated with the permitted boundary for a solid waste disposal areas.

Comment #18: *Barium is being discharged in the stormwater of Bridgeton Landfill.*

Response: Bridgeton stated in their application, received December 28, 2015, that barium is believed absent in the discharge from the outfalls at this facility; however, barium is a pollutant of concern associated with the West Lake Landfill. Quarterly monitoring of barium is added to outfalls #007, #008 and #009.

Comment #19: *The best professional judgment of the permit writer should require the same parameters, effluent limits, and benchmarks for outfalls #008 as for outfalls #003, #004, #005, and #007.*

Response: The draft permit has been modified to include the same parameters, effluent limits, and benchmarks at outfalls #008 and #009 as at the other outfalls at the site.

Comment #20: *The proposed draft permit would likely increase the amount of pollutants allowed to enter waters of the state, thus contributing to the impairment of water quality and the environment.*

Response: The permit renewal conforms to anti-backsliding provisions under the Clean Water Act. Further, the permit contains limitations for all pollutants which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality. The Missouri River is the only impaired waterbody receiving discharges from Bridgeton Landfill. The Missouri River is impaired for polychlorinated biphenyl (PCB) and chlordane, neither of which is authorized to be discharged from permitted outfalls at Bridgeton Landfill.

Comment #21: *A sediment sample (SED-4) taken from the north slope of OU-1 Area 2 was designated as a RIM sample. This area may reasonably have stormwater conveyed to Outfall #007.*

Response: Monthly radionuclide monitoring has been added at outfalls #007, #008 and #009 which discharge stormwater originating from portions of Areas 1 and 2 of Operable Unit 1.

Comment #22: *The Department should amend the permit to require monthly radioactive monitoring for the following parameters: gross alpha, gross beta, total uranium (U-234, U-235, and U-238), total thorium (Th-228, Th-230, and Th-232), and total radium (Ra-226 plus Ra-228). Individual analysis of the above mentioned isotopes*

Response: Monthly monitoring has been added at outfalls #007, #008 and #009 for the following radionuclides: gross alpha, beta particle and photon radioactivity (gross beta), total uranium, total radium, radium-226, and radium-228. Last, additional isotopic analysis is required for thorium, conditional upon the concentration of the gross and total radionuclides. See the permit and fact sheet for more information on radionuclide monitoring.

Comment #23: *Due to the compliance history of Bridgeton Landfill and the significant frequency of outbreaks of leachate from the facility, the draft permit should require monthly sampling of pollutants, including leachate indicators.*

Response: The discharge of landfill wastewater or contaminated stormwater to waters of the state is not authorized by this permit. Non-compliance or limit exceedance is not justification to increase the frequency of sampling but rather monitoring must be representative of the permitted discharge. Due to changing site conditions and activities, as well as variability in discharges from the site, the monitoring frequency for TSS has been increased to monthly. Monthly sampling will provide more representative data on solids in the discharges. In addition, monthly sampling for solids will provide a good indication of other pollutants of concern in the discharges, as solids are closely linked to other pollutants in stormwater discharges from sanitary landfills.

Comment #24: *The Department needs to be clear when describing the 'subsurface event'. Please replace 'subsurface event' with 'subsurface smoldering event'.*

Response: The terminology has been changed to 'subsurface smoldering event.'

Comment #25: *The Department should not rely on EPA to complete stormwater monitoring for radionuclides at the site before they make a decision on monitoring, as they currently only have a draft stormwater plan in place. Changes are likely to occur before the finalization of the plan, and it is unclear what it will contain. The finalization of the plan could take a very long time, given the time to finalization of other EPA documents. The Department should require radionuclide monitoring regardless of a final decision by EPA.*

Response: Monthly radionuclide monitoring has been added at outfalls #007, #008 and #009 which discharge stormwater originating from portions of Areas 1 and 2 of Operable Unit 1.

Comment #26: *The Department should extend the public notice period for the draft permit.*

Response: The 30 day public notice required by statute was extended in response to this comment. The public comment period for this permit took place from June 9, 2017 to November 13, 2017.

Comment #27: *The commenter requests the Department be transparent in the back-and-forth in comments regarding this permit with the EPA, and commenting on the EPA draft stormwater monitoring plan. They also request the stormwater monitoring plan comments be made available to the public.*

Response: As a result of public comment, the Department has posted to the web the comments sent to the U.S. Environmental Protection Agency on the Draft Stormwater Monitoring Plan, West Lake Superfund Site Operable Unit 1. The comments can be found at the link below. https://dnr.mo.gov/env/hwp/fedfac/docs/20171005CommentLetterDNRtoEPARISW_5.pdf

Comment #28: *The State of Missouri should keep in mind the waste does not belong where it is, it doesn't belong near a drinking water source, and it needs to be removed. It doesn't belong in the community.*

Response: This is outside the scope of the permit. See response to Comment #7.

Comment #29: *What is the difference between the State of Missouri's thresholds for the pollutants being monitored and the EPA's thresholds for the same stormwater pollutants?*

Response: Pollutant monitoring for discharges under a Missouri State Operating Permit is based on application materials, known pollutants of concern, water quality standards, and effluent limitation guidelines. Further, pollutant monitoring must be representative of the discharge. All discharges to waters of the state, even those under the oversight of federal agencies, must meet all Applicable or Relevant and Appropriate Requirements, which include, but no limited to, Missouri water quality standards and effluent limitations. Thus monitoring requirements, effluent limits, benchmarks, or "thresholds" under different regulatory authorities should be similar.

Comment #30: *Where does the EPA's monitoring of the water leaving the site stop and the Department's monitoring begin? Is it when it drops into the storm sewer, or when it crosses the street?*

Response: There is a map in the draft permit showing Bridgeton Landfill drainage areas and their designated outfalls under the permit. Similarly, EPA's Stormwater Monitoring Plan contains a figure illustrating the outfalls and monitoring locations. The permit can be viewed at https://dnr.mo.gov/env/wpp/permits/index.html. The draft plan is available at https://www.epa.gov/mo/west-lake-landfill.

Comment #31: *The lines designating the extent of the RIM at West Lake seem arbitrary, and have changed over time.*

Response: This is outside the scope of the permit. See response to Comment #7.

Comment #32: *The commenter provided three photographs during the public meeting which document what appears to be a hose discharging water. The commenter asks the Department to explain how the photo factors into the stormwater permit.*

Response: The hose in the photo was identified as belonging to the St. Louis Metropolitan Sewer District, who stated the hose was not discharging landfill related water of any sort; therefore, the hose in questions has no bearing on the draft permit.

Comment #33: *More should be done by the Department at this site. The community and natural resources deserve to be strongly protected without hindrance, interference, or influence from the landfill owner.*

Response: Discharge of non-contaminated stormwater from the Bridgeton Landfill is the only activity authorized by the permit. The permit contains requirements necessary to protect water of the state and their designated uses. Other non-water quality related issues are outside the scope of the permit.

Comment #34: *The permit isolates areas for EPA's jurisdiction versus the Department's jurisdiction. How would commingling of effluent between the West Lake Site and the Bridgeton Landfill be prevented? This site has a history of surface RIM. We know from previous characterizations back in the 1980s the RIM is windblown and moved around by water. There is not currently a thorough characterization of where the RIM is located on the site. Any area of this site and areas near the site may be contaminated. The permit should be extended to monitor areas which are currently covered by EPA. The entire site should be characterized for RIM.*

Response: Monthly radionuclide monitoring has been added at outfalls #007, #008 and #009 which discharge stormwater originating from portions of Areas 1 and 2 of Operable Unit 1. Other aspects of this comment are outside the scope of the permit. See response to Comment # 7.

Comment #35: *The permit should implement testing of downstream sediment and other locations where sediment may accumulate, as there's a chance impacted sediment could be accumulating off-site.*

Response: This is outside the scope of the permit. See response to Comment #7.

Comment #36: *The U.S. Army Corps of Engineers is the right agency to clean up West Lake's nuclear weapons waste. The EPA should remain responsible for non-radioactive waste contamination at West Lake.*

Response: This is outside the scope of the permit. See response to Comment #7.

Comment #37: *What kind of treatment does the leachate receive in the on-site wastewater pre-treatment plant prior to it being sent to MSD?*

Response: The pre-treatment plant at the Bridgeton Landfill utilizes clarification, screening, chemical addition, ultra-filtration, aeration, and chemical sludge separation. Additional information on the leachate treatment system can be obtained at http://dnr.mo.gov/bridgeton/docs/2015-01LeachateManagementPlan-FullOperationCEC.pdf.

Comment #38: *These are some of the most toxic compounds on the planet. There is a known cancer cluster in this area. The EPA has a poor track record in dealing with this site. Republic Services has a history of non-compliance with the standards. It is the responsibility of the Department to protect the health of the people of Missouri.*

Response: Discharge of non-contaminated stormwater from the Bridgeton Landfill is the only activity authorized by the permit. The permit contains requirements necessary to protect water of the state and their designated uses. Other aspects of this comment are outside the scope of the permit. See response to Comment # 7.

Comment #39: *The location of Bridgeton Landfill is a horrible site for a landfill. It's in the floodplain in a metropolitan area. It is not an approved location to hold hazardous waste.*

Response: This is outside the scope of the permit.

Comment #40: *It is concerning the PRPs would be in charge of their own monitoring. The laboratory Bridgeton Landfill uses was convicted of falsifying information. The Department should sample the site to ensure it is done correctly and honestly.*

Response: Permittees in the State of Missouri do their own monitoring and reporting, or contracts with a laboratory providing this service. Title 40 of the Code of Federal Regulations Part 122.41 states that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method; or any person who knowingly makes any false statement, representation, or certification in any record or other document maintained or submitted under the permit shall, upon conviction, be punished by a fine or imprisonment. It is the obligation of the permittee, under law, to provide accurate and true results and documentation. As a result of public comment, the Department has added Special Condition #17 which requires the permittee to submit laboratory reports including data, quality assurance analysis, and chain of custody, for all discharge monitoring conducted in accordance with the permit, for the Department's review.

Comment #41: *Commenter indicated an area on a provided map, and asked if the area was being monitoring for radionuclides and other pollutants (to the west of the West Lake Area OU-2 Inactive Sanitary Landfill).*

Response: The Department is not aware of any monitoring being conducted in this area. This area is under the authority of EPA.

Comment #42: *What is the timeline for the final remedy of the site?*

Response: This is outside the scope of the permit. See response to Comment #7.

Comment #43: *If monitoring is done and the levels are lethal, what does that mean? Do the residents need to evacuate or do we start drinking and showering with bottled water?*

Response: If monitoring data indicates the surface water discharges cause, have reasonable potential to cause, or are contributing to exceedances of Missouri's Water Quality Standards at the facility outfall, corrective actions through the Department or EPA will immediately commence to find the cause of the discharge, remedy any existing stormwater management issue, and modifies the

permit as necessary. For residents served by a municipal drinking water supply, radionuclides in finish water, served to the public, are controlled through the Safe Drinking Water Act and require additional water supply system sampling independent of the monitoring required by this permit. The Department will continue to oversee and respond to conditions at the site, including public notification where and when appropriate.

Comment #44: *Will the Department consider a fate and transport study studying where radioactive particles go when they go off-site, at the outfalls of the landfill? Please require off-site stormwater testing for rad waste in the permit.*

Response: Title 40 of the Code of Federal Regulations Part 122.44(d) requires limitations for all pollutants which the Department determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality. Existing data for the outfalls proposed in the permit show the discharges do not cause, or have reasonable potential to cause, or contribute to an excursion above state water quality standards for radionuclides. Monthly radionuclide monitoring has been added at outfalls #007, #008 and #009 which discharge stormwater originating from portions of Areas 1 & 2 of Operable Unit 1. Additional study or off-site testing is not required under the permit.

Comment #45: *If the RIM waste belongs to EPA, why did the State test the recent sediment in runoff?*

Response: The Department has a daily presence monitoring the perimeter of the Bridgeton Landfill for odors and site upsets. When the illegal discharge was noted, the Department responded to stormwater overflow concerns by assessing the situation and collecting a stormwater sample for analysis on April 30, 2017. For additional information on this sample and result, see response to Comment #10. The portions of the site containing RIM are handled under the authority of EPA Superfund Program.

Comment #46: *The permit must address all of the wastewater leaving the site regardless of where the waste originates. Include lagoons and water retention areas.*

Response: Monthly radionuclide monitoring has been added at outfalls #007, #008 and #009 which discharge stormwater originating from portions of Areas 1 and 2 of Operable Unit 1. Further, the permit contains requirements for permitted outfalls that are necessary to protect waters of the state and their designated uses. Other aspects of this comment are outside the scope of the permit. See response to Comment # 7.

Comment #47: *Can you explain in a basic way what treatment is done at the site to the water?*

Response: The stormwater treatment at the site employs Best Management Practices (BMPs) to treat and abate the discharge of pollutants. 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. BMPs at Bridgeton Landfill include rock check dams, berms which redirect water, sediment settling ponds, inspections, and others. Wastewater treatment processes are listed above in response to Comment #37.

Comment #48: *The boundaries between West Lake Landfill and Bridgeton Landfill are complicated and unclear. This makes it challenging for the public to know who is responsible for regulating portions of the site.*

Response: The Department understands the oversight is somewhat complicated. Maps are provided online at the Bridgeton Landfill site (https://dnr.mo.gov/bridgeton/), in the draft permit, and were displayed during the public meeting. Further, the presentation given at the public meeting is also available at the website above. The Department has made a concerted effort in an attempt to facilitate understanding of the regulatory oversight. If you have any further questions about this permit or the site, please feel free to contact the Department by phone at (573) 751-3443, e-mail at contact@dnr.mo.gov, or by mail at PO Box 176, Jefferson City, MO 65102-0176.

Comment #49: *Leachate is allowed to drain into the storm sewer system. Pictures documenting this have been taken.*

Response: The discharge of landfill wastewater or contaminated stormwater to waters of the state is not authorized by this permit. See response to Comment #5.

DATE OF FACT SHEET: 02/23/2018

COMPLETED BY:
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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.

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.

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.
   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 D – Administrative Requirements

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

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

c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed $10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

2. **Duty to Reapply.**
   a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
   b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
   c. A permittees with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. **Proper Operation and Maintenance**. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

6. **Permit Actions.**
   a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
      i. Violations of any terms or conditions of this permit or the law;
      ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
      iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
      iv. Any reason set forth in the Law or Regulations.
   b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. **Permit Transfer.**
   a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
   b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
   c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.

8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.

10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
    a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
    d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.

12. **Closure of Treatment Facilities.**
    a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
    b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.

13. **Signatory Requirement.**
    a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
    b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
    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.

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

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED 12/28/15	FEE SUBMITTED

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

1. This application is for:
   - ☐ An operating permit and antidegradation review public notice
   - ☐ A construction permit following an appropriate operating permit and antidegradation review public notice
   - ☐ A construction permit and concurrent operating permit and antidegradation review public notice
   - ☐ A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required)
   - ☐ An operating permit for a new or unpermitted facility — Construction Permit # _____
   - ☑ An operating permit renewal: permit # MO- 0112771 — Expiration Date 04/21/2016
   - ☐ An operating permit modification: permit # MO-_____ — Reason: _____

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

2. FACILITY

NAME		TELEPHONE WITH AREA CODE	
Bridgeton Landfill		(314) 744-8165	
		FAX	
ADDRESS (PHYSICAL)	CITY	STATE	ZIP CODE
13570 St. Charles Rock Road	Bridgeton	MO	63044

3. OWNER

NAME	E-MAIL ADDRESS	TELEPHONE WITH AREA CODE	
Bridgeton Landfill, LLC		(314) 744-8165	
		FAX	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE
13570 St. Charles Rock Road	Bridgeton	MO	63044

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

4. CONTINUING AUTHORITY

NAME		TELEPHONE WITH AREA CODE	
Same as owner			
		FAX	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE

5. OPERATOR

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

6. FACILITY CONTACT

NAME	TITLE	TELEPHONE WITH AREA CODE
Derek Bouchard	Environmental Specialist	(314) 744-8165
		FAX

7. ADDITIONAL FACILITY INFORMATION

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

001 ____¼ ____¼ Sec ____ T ____ R ____ ____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

002 ____¼ ____¼ Sec ____ T ____ R ____ ____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____

003 NW ¼ NW ¼ Sec 3 T 46N R 5E St. Louis County
UTM Coordinates Easting (X): 721,556 Northing (Y): 4,293,546

004 NW ¼ NE ¼ Sec 3 T 46N R 5E St. Louis County
UTM Coordinates Easting (X): 721,196 Northing (Y): 4,294,471

7.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.
001 – SIC _____ and NAICS _____ 002 – SIC _____ and NAICS _____
003 – SIC 4953 and NAICS _____ 004 – SIC 4953 and NAICS _____

8.	ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION (Complete all forms that are applicable.)		
A.	Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? If yes, complete Form C (unless storm water only, then complete U.S. Environmental Protection Agency Form 2F per Item C below).	YES ☐	NO ☑
B.	Is your facility considered a "Primary Industry" under EPA guidelines: If yes, complete Forms C and D.	YES ■	NO ☐
C.	Is application for storm water discharges only? If yes, complete EPA Form 2F.	YES ☑	NO ☐
D.	Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.		
E.	Is wastewater land applied? If yes, complete Form I.	YES ☐	NO ☑
F.	Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.	YES ☐	NO ☑

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

NAME			
HW Development, LLC			
ADDRESS	CITY	STATE	ZIP CODE
13060 Old St. Charles Road	Bridgeton	MO	63044

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

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE WITH AREA CODE
Derek Bouchard, Environmental Specialist	(314) 744-8165
SIGNATURE: Derek Bouchard	DATE SIGNED: 12/23/15

MO 780-1479 (01-09)

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

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

HAVE YOU INCLUDED:

- [x] Appropriate Fees?
- [x] Map at 1" = 2000' scale?
- [x] Signature?
- [x] Form C, if applicable?
- [x] Form D, if applicable?
- [x] Form 2F, if applicable?
- [ ] Form I (Irrigation), if applicable?
- [ ] Form R (Sludge), if applicable?

Bridgeton Landfill
Continued from Form A

7.1 Legal Descriptions of Outfalls Cont.

005 SE ¼ NW ¼ SEC 3 T46N R5E St. Louis County
UTM Coordinates Easting (X): 721,216 Northing (Y): 4,293,765 SIC: 4953

006 (Requesting to be removed)
SW ¼ SE ¼ SEC 34 T47N R5E St. Louis County
UTM Coordinates Easting (X): 721,668 Northing (Y): 4,294,963 SIC: 4953

007 NE ¼ SW ¼ SEC 34 T47N R5E St. Louis County
UTM Coordinates Easting (X): 722,114 Northing (Y): 4,293,484 SIC: 4953

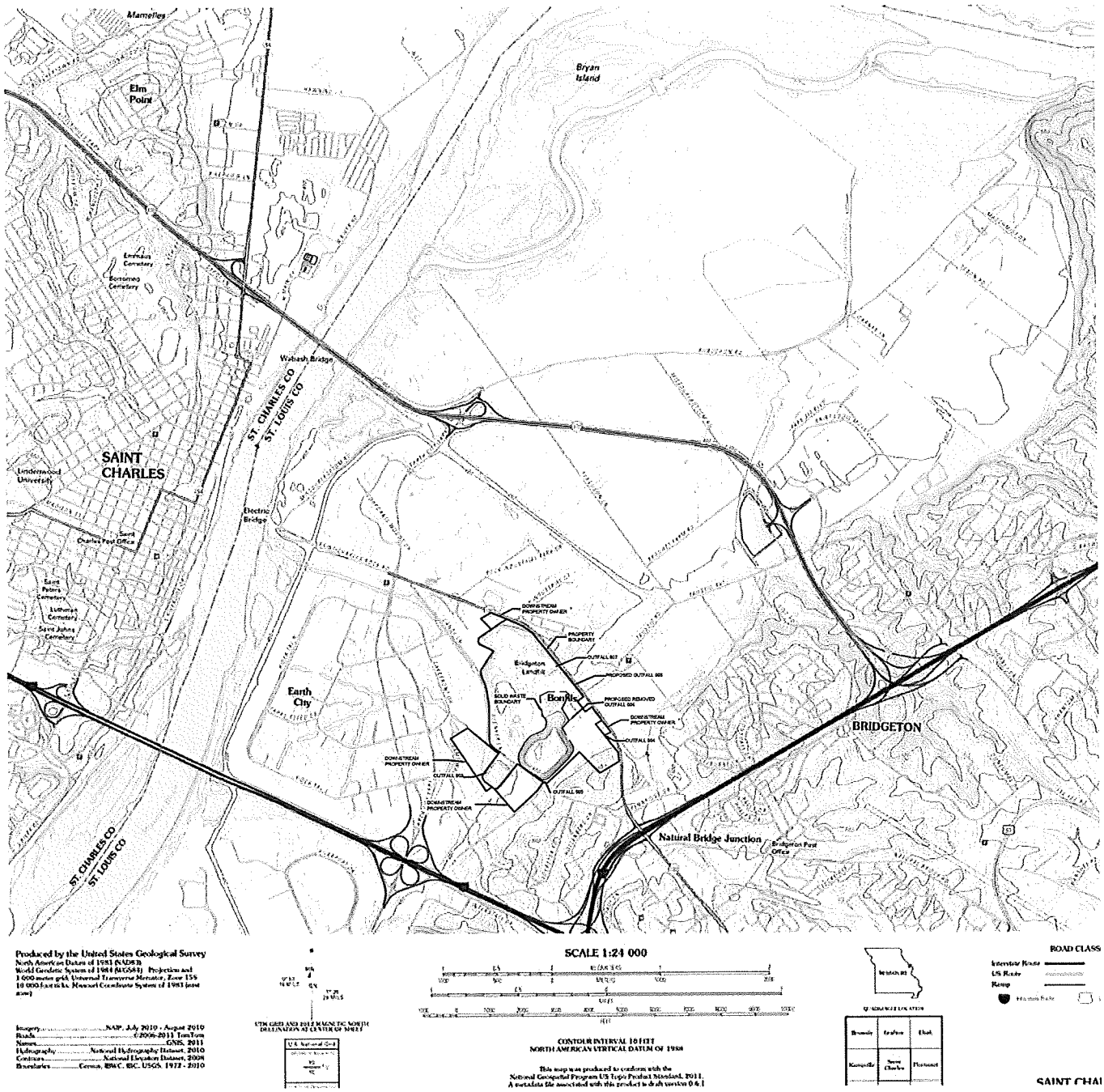
008 NE 1/4 SW1/4 SEC 34 T47N R5E St. Louis County
UTM Coordinates Easting (X): 722,379 Northing (Y): 4,294,335 SIC: 4953
*Location is approximate

9.0 Downstream Landowners Cont.

Tusler Family LLLP
13581 St. Charles Rock Road
Bridgeton, MO 63044

Dugan Realty LLC
13201 Corporate Exchange Drive
Bridgeton, MO 63044

STL Properties LLC
4614 Crossroads Industrial Drive
Bridgeton, MO 63044



NOTE:
MAP TAKEN FROM USGS QUADRANGLE MAP ST. CHARLES, MO (2012)

APPROXIMATE GRAPHIC SCALE

2000 0 1000 2000 4000

1 inch = 2000 ft.

N

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PREPARED FOR:	SITE LOCATION	Weaver Consultants Group	DRAWN BY: DT
BRIDGETON LANDFILL, LLC	BRIDGETON LANDFILL 13560 ST CHARLES ROCK ROAD BRIDGETON, MO	COLUMBIA, MISSOURI (888) 660-0346 www.wcgrp.com	REVIEWED BY: MC DATE: 11/24/2015 FILE: 0120-131-10 CAD: Site Location.dwg
	REUSE OF DOCUMENTS THIS DOCUMENT, AND THE DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WEAVER CONSULTANTS GROUP, AND IS NOT TO BE USED IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF WEAVER CONSULTANTS GROUP.		FIGURE 1

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH

FORM C – APPLICATION FOR DISCHARGE PERMIT – MANUFACTURING, COMMERCIAL, MINING, SILVICULTURE OPERATIONS, PROCESS AND STORMWATER

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY
Bridgeton Landfill

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO-0112771

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

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

A. FIRST 4953 B. SECOND 3273

C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) _____1/4 _____1/4 SEC_____ T_____ R_____ _____COUNTY

003 - SE 1/4 NE 1/4 SEC 3 T46N R5E St. Louis County
004 - NW 1/4 NE 1/4 SEC 3 T46N R5E St. Louis County
005 - SE 1/4 NW 1/4 SEC 3 T46N R5E St. Louis County
007 - SW 1/4 NE 1/4 SEC 34 T47N R5E St. Louis County
008 - SW 1/4 NE 1/4 SEC 34 T47N R5E St. Louis County
*Approx legal description for proposed Outfall #008

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)	RECEIVING WATER
003 - Unnamed Tributary to Missouri River	
004 - Unnamed Tributary to Missouri River	
005 - Unnamed Tributary to Missouri River	
007 - Unnamed Tributary to Missouri River	
008 - Unnamed Tributary to Missouri River	

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS
Municipal Solid Waste Landfill

A. 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 flows between intakes, operations, treatment units, public sewers and outfalls. If a water balance cannot by 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.

B. For each outfall, provide a description of 1. All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water and storm water runoff. 2. The average flow contributed by each operation. 3. The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO.	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
(LIST)	A. OPERATION (LIST)	B. AVERAGE FLOW (INCLUDE UNITS) (MAXIMUM FLOW)	A. DESCRIPTION	B. LIST CODES FROM TABLE A
003	Storm water Runoff	0.543 mgd (8.96 mgd)	Sedimentation	1-U
			Discharge to Surface	4-A
			water	
004	Storm water Runoff	0.74 mgd (12.2 mgd)	Sedimentation	1-U
			Discharge to Surface	4-A
			water	
005	Storm water Runoff	0.472 mgd (7.82 mgd)	Sedimentation	1-U
			Discharge to Surface	4-A
			water	
007	Storm water Runoff	0.12 mgd (1.96 mgd)	Discharge to Surface	4-A
			water	
008 (new)	Storm water Runoff	0.014 mgd (0.231 mgd)	Discharge to Surface	4-A
			water	

2.40 CONTINUED

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

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

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

2.50 MAXIMUM PRODUCTION

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

☐ **YES** *(COMPLETE B.)* ☑ **NO** *(GO TO SECTION 2.60)*

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

☐ **YES** *(COMPLETE c.)* ☑ **NO** *(GO TO SECTION 2.60)*

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

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

2.60 IMPROVEMENTS

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

☐ **YES** *(COMPLETE THE FOLLOWING TABLE)* ☑ **NO** *(GO TO 3.00)*

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

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

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

3.00 INTAKE AND EFFLUENT CHARACTERISTICS

A. & B. SEE INSTRUCTIONS BEFORE PROCEEDING – COMPLETE ONE TABLE FOR EACH OUTFALL – ANNOTATE THE OUTFALL NUMBER IN THE SPACE PROVIDED.
NOTE: TABLE 1 IS INCLUDED ON SEPARATE SHEETS NUMBERED FROM PAGE 6 TO PAGE 7.

C. USE THE SPACE BELOW TO LIST ANY OF THE POLLUTANTS LISTED IN PART B OF THE INSTRUCTIONS, WHICH YOU KNOW OR HAVE REASON TO BELIEVE IS DISCHARGED OR MAY BE DISCHARGED FROM ANY OUTFALL. FOR EVERY POLLUTANT YOU LIST, BRIEFLY DESCRIBE THE REASONS YOU BELIEVE IT TO BE PRESENT AND REPORT ANY ANALYTICAL DATA IN YOUR POSSESSION.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
NA	NA	NA	NA

3.10 BIOLOGICAL TOXICITY TESTING DATA

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

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

3.20 CONTRACT ANALYSIS INFORMATION

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

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

A. NAME	B. ADDRESS	C. TELEPHONE *(area code and number)*	D. POLLUTANTS ANALYZED *(list)*
PDC Laboratories, Inc.	3278 N. Highway 67 Florissant, MO 63033	(314) 432-0550	Chloride, Sulfate, BOD, COD, Hexavalent Chromium, Oil & Grease, SS, TSS, Ammonia-N, Trivalent Chromium, Aluminum, Mercury, Antimony, Arsenic, Beryllium, Hardness, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Nickel, Selenium, Silver, Thallium, Zinc, Benzene, Ethylbenzene

3.30 CERTIFICATION

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

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE
Derek Bouchard, Environmental Specialist	(314) 744-8165
SIGNATURE (SEE INSTRUCTIONS) Derek Bouchard	DATE SIGNED 12/23/15

2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?

☐ YES *(LIST ALL SUCH POLLUTANTS BELOW)* ■ NO *(GO TO B)*

B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?

☐ YES *(COMPLETE C BELOW)* ■ NO *(GO TO SECTION 3.00)*

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILIITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

3.00 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

■ YES *(LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)*

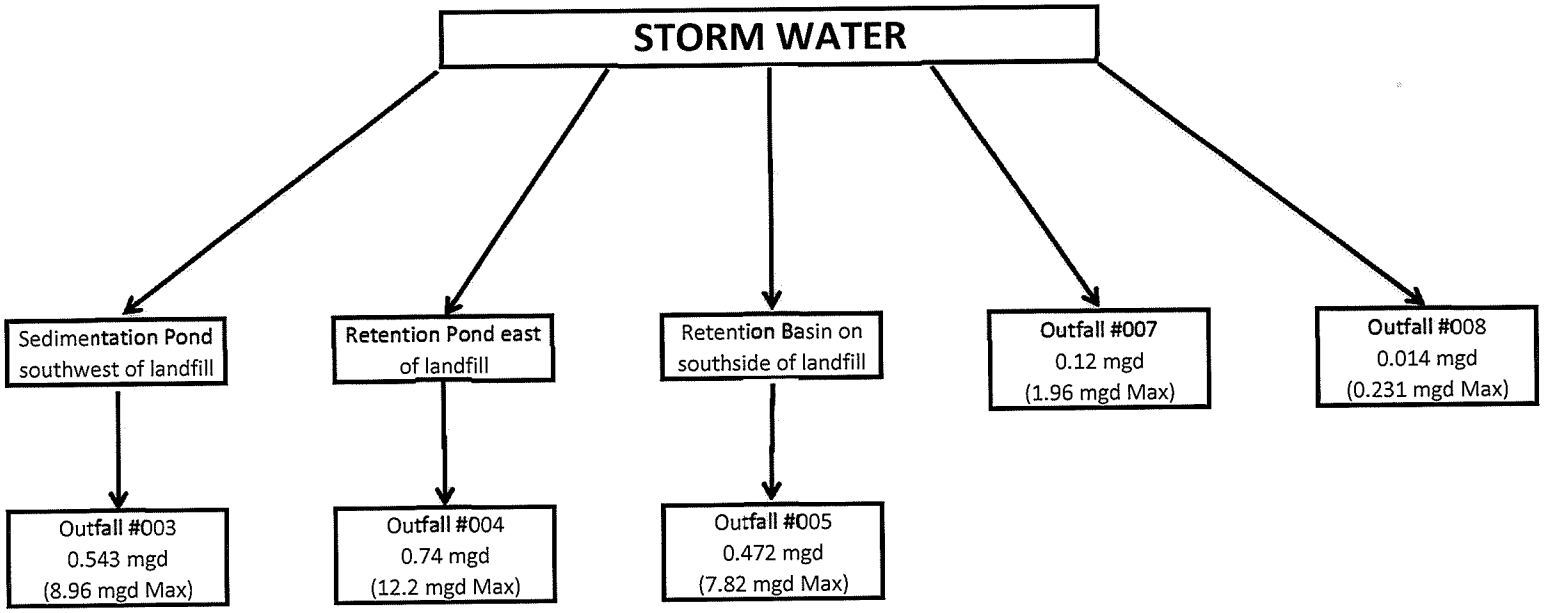
☐ NO *(GO TO SECTION 4.00)*

A. NAME	B. ADDRESS	C. TELEPHONE *(area code and number)*	D. POLLUTANTS ANALYZED *(list)*
PDC Laboratories, Inc.	3278 N. Highway 67	(314) 432-0550	See Above
	Florissant, MO 63033		

4.00 CERTIFICATION

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

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	PHONE NUMBER (AREA CODE AND NUMBER)
Derek Bouchard, Environmental Specialist	(573) 744-8165
SIGNATURE Derek Bouchard	DATE SIGNED 12/23/15



*Average flow was calculated using average annual rainfall and average annual precipitaiton days for STL Lambert Airport
**Maximum flow was calculated using a 25 year, 24 hour storm event (6 inches precipitation)
***For a conservative approach, 100% impervious surface was assumed for all outfall flow calculations

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

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO. 003

INTAKE AND EFFLUENT CHARACTERISTICS

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

1. POLLUTANT	2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	8.9	125.8					1	mg/L	lbs			
B. Chemical Oxygen Demand (COD)	15	211.9					1	mg/L	lbs			
C. Total organic Carbon (TOC)	n/a	n/a										
D. Total Suspended Solids (TSS)	120	1696					1	mg/L	lbs			
E. Ammonia *(as N)*	0.41	5.79					1	mg/L	lbs			
F. Flow	VALUE 1.694		VALUE		VALUE		1	mgd		VALUE		
G. Temperature *(winter)*	VALUE 5		VALUE		VALUE			°C		VALUE		
H. Temperature *(summer)*	VALUE 25		VALUE		VALUE			°C		VALUE		
I. pH	MINIMUM 7.74	MAXIMUM 7.74	MINIMUM	MAXIMUM				STANDARD UNITS				

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

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

MO 780-1514 (06-13)

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic *(as N)*		X												
H. Oil and Grease	X		<4.7						1	mg/L				
I. Phosphorus *(as P)*, Total (7723-14-0)		X												
J. Sulfate *(as SO^4)* (14808-79-8)	X		189	2670					1	mg/L	lbs			
K. Sulfide *(as S)*		X												
L. Sulfite (as SO^3) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)	X		2.6	36.74					1	mg/L	lbs			
O. Barium, Total (7440-39-3)		X												
P. Boron, Total (7440-42-8)		X												
Q. Cobalt, Total (7440-48-4)	X		<0.002						1	mg/L				
R. Iron, Total (7439-89-6)	X		3.4	48					1	mg/L	lbs			
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

MO 780-1514 (06-13)

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X	<0.010						1	mg/L				
2M. Arsenic, Total (7440-38-2)	X		<0.015						1	mg/L				
3M. Beryllium, Total (7440-41-7)	X		<0.0010						1	mg/L				
4M. Cadmium, Total (7440-43-9)	X		<0.0020						1	mg/L				
5M. Chromium III (16065-83-1)	X		<0.005						1	mg/L				
6M. Chromium VI (18540-29-9)	X		<0.005						1	mg/L				
7M. Copper, Total (7440-50-8)	X		0.0032	0.045					1	mg/L	lbs			
8M. Lead, Total (7439-92-1)	X		<0.010						1	mg/L				
9M. Mercury, Total (7439-97-6)	X		<0.0002						1	mg/L				
10M. Nickel, Total (7440-02-0)	X		0.006	0.085					1	mg/L	lbs			
11M. Selenium, Total (7782-49-2)	X		<0.010						1	mg/L				
12M. Silver, Total (7440-22-4)		X	<0.0020						1	mg/L				
13M. Thallium, Total (7440-28-0)		X	<0.020						1	mg/L				
14M. Zinc, Total (7440-66-6)	X		0.027	0.382					1	mg/L	lbs			
15M. Cyanide, Amenable to Chlorination		X												
16M. Phenols, Total		X	n/a											
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

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

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO. 004

INTAKE AND EFFLUENT CHARACTERISTICS

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

1. POLLUTANT	2. EFFLUENT A. MAXIMUM DAILY VALUE (1) CONCENTRATION	2. EFFLUENT A. MAXIMUM DAILY VALUE (2) MASS	2. EFFLUENT B. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	2. EFFLUENT B. MAXIMUM 30 DAY VALUE (if available) (2) MASS	2. EFFLUENT C. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	2. EFFLUENT C. LONG TERM AVRG. VALUE (if available) (2) MASS	2. EFFLUENT D. NO. OF ANALYSES	3. UNITS (specify if blank) A. CONCEN-TRATION	3. UNITS (specify if blank) B. MASS	4. INTAKE (optional) A. LONG TERM AVRG. VALUE (1) CONCENTRATION	4. INTAKE (optional) A. LONG TERM AVRG. VALUE (2) MASS	4. INTAKE (optional) B. NO. OF ANALYSES
A. Biochemical Oxygen Demand (BOD)	<5	<53.9					1	mg/L	lbs			
B. Chemical Oxygen Demand (COD)	<50	<539					1	mg/L	lbs			
C. Total organic Carbon (TOC)	n/a	n/a					1	mg/L	lbs			
D. Total Suspended Solids (TSS)	<6	<64.7					1	mg/L	lbs			
E. Ammonia *(as N)*	<0.10	<1.03					1	mg/L	lbs			
F. Flow	VALUE 1.293		VALUE		VALUE		1	mgd		VALUE		
G. Temperature *(winter)*	VALUE 5		VALUE		VALUE			°C		VALUE		
H. Temperature *(summer)*	VALUE 25		VALUE		VALUE			°C		VALUE		
I. pH	MINIMUM 7.92	MAXIMUM 7.92	MINIMUM	MAXIMUM				STANDARD UNITS				

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

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

MO 780-1514 (06-13)

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic *(as N)*		X												
H. Oil and Grease	X		<5.0						1	mg/L				
I. Phosphorus *(as P)*, Total (7723-14-0)		X												
J. Sulfate *(as SO^4)* (14808-79-8)	X		43	445					1	mg/L	lbs			
K. Sulfide *(as S)*		X												
L. Sulfite (as SO^3) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)	X		0.149	1.541					1	mg/L	lbs			
O. Barium, Total (7440-39-3)		X												
P. Boron, Total (7440-42-8)		X												
Q. Cobalt, Total (7440-48-4)	X		<5						1	ug/L				
R. Iron, Total (7439-89-6)	X		163	1.69					1	ug/L	lbs			
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X	<50.0						1	ug/L				
2M. Arsenic, Total (7440-38-2)	X		<25.0						1	ug/L				
3M. Beryllium, Total (7440-41-7)	X		<0.50						1	ug/L				
4M. Cadmium, Total (7440-43-9)	X		<2.00						1	ug/L				
5M. Chromium III (16065-83-1)	X		<10.0						1	ug/L				
6M. Chromium VI (18540-29-9)	X		<5.0						1	ug/L				
7M. Copper, Total (7440-50-8)	X		<5.0						1	ug/L				
8M. Lead, Total (7439-92-1)	X		<15.0						1	ug/L				
9M. Mercury, Total (7439-97-6)	X		<0.20						1	ug/L				
10M. Nickel, Total (7440-02-0)	X		<5.0						1	ug/L				
11M. Selenium, Total (7782-49-2)	X		<40.0						1	ug/L				
12M. Silver, Total (7440-22-4)		X	<5.0						1	ug/L				
13M. Thallium, Total (7440-28-0)		X	<50.0						1	ug/L				
14M. Zinc, Total (7440-66-6)	X		<10.0						1	ug/L				
15M. Cyanide, Amenable to Chlorination		X												
16M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

MO 780-1514 (06-13)

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

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO. 005

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

1. POLLUTANT	2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	<5	<24.1					1	mg/L	lbs			
B. Chemical Oxygen Demand (COD)	36	173.4					1	mg/L	lbs			
C. Total organic Carbon (TOC)	n/a						1	mg/L	lbs			
D. Total Suspended Solids (TSS)	285	1372					1	mg/L	lbs			
E. Ammonia *(as N)*	0.14	0.674					1	mg/L	lbs			
F. Flow	VALUE 0.577		VALUE		VALUE		1	mgd		VALUE		
G. Temperature *(winter)*	VALUE 5		VALUE		VALUE			°C		VALUE		
H. Temperature *(summer)*	VALUE 25		VALUE		VALUE			°C		VALUE		
I. pH	MINIMUM 7.74	MAXIMUM 7.74	MINIMUM	MAXIMUM				STANDARD UNITS				

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

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

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic *(as N)*		X												
H. Oil and Grease	X		<5.0						1	mg/L				
I. Phosphorus *(as P)*, Total (7723-14-0)		X												
J. Sulfate *(as SO^4)* (14808-79-8)	X		26	125.2					1	mg/L	lbs			
K. Sulfide *(as S)*		X												
L. Sulfite (as SO^3) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)	X		30200	145.4					1	ug/L	lbs			
O. Barium, Total (7440-39-3)		X												
P. Boron, Total (7440-42-8)		X												
Q. Cobalt, Total (7440-48-4)	X		7.9	0.038					1	ug/L	lbs			
R. Iron, Total (7439-89-6)	X		29100	140.1					1	ug/L	lbs			
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X	<50.0						1	ug/L				
2M. Arsenic, Total (7440-38-2)	X		10	0.048					1	ug/L	lbs			
3M. Beryllium, Total (7440-41-7)	X		1.3	0.006					1	ug/L	lbs			
4M. Cadmium, Total (7440-43-9)	X		0.4	0.002					1	ug/L	lbs			
5M. Chromium III (16065-83-1)	X		28	0.135					1	ug/L	lbs			
6M. Chromium VI (18540-29-9)	X		<250						1	ug/L				
7M. Copper, Total (7440-50-8)	X		20.3	0.098					1	ug/L	lbs			
8M. Lead, Total (7439-92-1)	X		15.6	0.075					1	ug/L	lbs			
9M. Mercury, Total (7439-97-6)	X		<0.020						1	ug/L				
10M. Nickel, Total (7440-02-0)	X		26.9	0.129					1	ug/L	lbs			
11M. Selenium, Total (7782-49-2)	X		<40						1	ug/L				
12M. Silver, Total (7440-22-4)		X	<5.0						1	ug/L				
13M. Thallium, Total (7440-28-0)		X	<50.0						1	ug/L				
14M. Zinc, Total (7440-66-6)	X		74.4	0.358					1	ug/L	lbs			
15M. Cyanide, Amenable to Chlorination		X												
16M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

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

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO. 007

INTAKE AND EFFLUENT CHARACTERISTICS

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

1. POLLUTANT	2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	60	354.0					1	mg/L	lbs			
B. Chemical Oxygen Demand (COD)	189	1115.2					1	mg/L	lbs			
C. Total organic Carbon (TOC)	n/a											
D. Total Suspended Solids (TSS)	86	507.5					1	mg/L	lbs			
E. Ammonia *(as N)*	0.07	0.413					1	mg/L	lbs			
F. Flow	VALUE 0.707		VALUE		VALUE					VALUE		
G. Temperature *(winter)*	VALUE 5		VALUE		VALUE			°C		VALUE		
H. Temperature *(summer)*	VALUE 25		VALUE		VALUE			°C		VALUE		
I. pH	MINIMUM 7.4	MAXIMUM 7.4	MINIMUM	MAXIMUM				STANDARD UNITS				

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

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

MO 780-1514 (06-13)

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic *(as N)*		X												
H. Oil and Grease	X		8	47.2					1	mg/L	lbs			
I. Phosphorus *(as P)*, Total (7723-14-0)		X												
J. Sulfate *(as SO^4)* (14808-79-8)	X		133	784.8					1	mg/L	lbs			
K. Sulfide *(as S)*		X												
L. Sulfite (as SO^3) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)	X		2800	16.52					1	ug/L	lbs			
O. Barium, Total (7440-39-3)		X												
P. Boron, Total (7440-42-8)		X												
Q. Cobalt, Total (7440-48-4)	X		3.3	0.0195					1	ug/L	lbs			
R. Iron, Total (7439-89-6)	X		3560	21					1	ug/L	lbs			
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

MO 780-1514 (06-13)

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X	<50.0						1	ug/L	lbs			
2M. Arsenic, Total (7440-38-2)	X		<25.0						1	ug/L	lbs			
3M. Beryllium, Total (7440-41-7)	X		<0.50						1	ug/L	lbs			
4M. Cadmium, Total (7440-43-9)	X		0.50	0.003					1	ug/L	lbs			
5M. Chromium III (16065-83-1)	X		6	0.0354					1	ug/L	lbs			
6M. Chromium VI (18540-29-9)	X		<25.0						1	ug/L	lbs			
7M. Copper, Total (7440-50-8)	X		3.3	0.0195					1	ug/L	lbs			
8M. Lead, Total (7439-92-1)	X		12	0.0708					1	ug/L	lbs			
9M. Mercury, Total (7439-97-6)	X		0.272	0.0016					1	ug/L	lbs			
10M. Nickel, Total (7440-02-0)	X		11.4	0.0673					1	ug/L	lbs			
11M. Selenium, Total (7782-49-2)	X		<40.0						1	ug/L	llbs			
12M. Silver, Total (7440-22-4)		X	<5.0						1	ug/L	lbs			
13M. Thallium, Total (7440-28-0)		X	<50.0						1	ug/L	lbs			
14M. Zinc, Total (7440-66-6)	X		79	0.466					1	ug/L	lbs			
15M. Cyanide, Amenable to Chlorination		X												
16M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

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

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO. 008

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

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

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

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

MO 780-1514 (06-13)

*Outfall #008 has yet to be surveyed and developed. No sample has been taken for this location.

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

MO 780-1514 (06-13)

*Outfall #008 has yet to be surveyed and developed. No sample has been taken for this location.

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

*Outfall #008 has yet to be surveyed and developed. No sample has been taken for this location.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH

FORM D – APPLICATION FOR DISCHARGE PERMIT – PRIMARY INDUSTRIES

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY
Bridgeton Landfill

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO - 0112771

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below:

INDUSTRY CATEGORY

Adhesives and sealants
Aluminum forming
Auto and other laundries
Battery manufacturing
Coal mining
Coil coating
Copper forming
Electric and electronic compounds
Electroplating
Explosives manufacturing
Foundries
Gum and wood chemicals
Inorganic chemicals manufacturing
Iron and steel manufacturing
Leather tanning and finishing
Landfill
Mechanical products manufacturing
Nonferrous metals manufacturing
Ore mining
Organic chemicals manufacturing
Paint and ink formulation
Pesticides
Petroleum refining
Pharmaceutical preparations
Photographic equipment and supplies
Plastic and synthetic materials manufacturing
Plastic processing
Porcelain enameling
Printing and publishing
Pulp and paperboard mills
Rubber processing
Soap and detergent manufacturing
Steam electric power plants
Textile mills
Timber products processing

APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES

TABLE II

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	003

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (*all seven pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TEST-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-9)	✓		✓	<0.010						1	mg/L				
2M. Arsenic, Total (7440-38-2)	✓	✓		<0.015						1	mg/L				
3M. Beryllium, Total (7440-41-7)	✓	✓		<0.001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	✓	✓		<0.002						1	mg/L				
5M. Chromium III (16065-83-1)	✓	✓		<0.005						1	mg/L				
6M. Chromium VI (18540-29-9)	✓	✓		<0.005						1	mg/L				
7M. Copper, Total (7440-50-8)	✓	✓		0.0032	0.045					1	mg/L	lbs			
8M. Lead, Total (7439-92-1)	✓	✓		<0.010						1	mg/L				
9M. Magnesium Total (7439-95-4)			✓												
10M. Mercury, Total (7439-97-6)	✓	✓		<0.0002						1	mg/L				
11M. Molybdenum Total (7439-98-7)			✓												
12M. Nickel, Total (7440-02-0)	✓	✓		0.006	0.085					1	mg/L	lbs			
13M. Selenium, Total (7782-49-2)	✓	✓		<0.010						1	mg/L				
14M. Silver, Total (7440-22-4)		✓	✓	<0.002						1	mg/L				
15M. Thallium, Total (7440-28-0)		✓	✓	<0.020						1	mg/L				
16M. Tin Total (7440-31-5)			✓												
17M. Titanium Total (7440-32-6)			✓												
18M. Zinc, Total (7440-66-6)	✓	✓		0.027	0.382					1	mg/L	lbs			

CONTINUED FROM PAGE 3

19M. Cyanide, Amenable to Chlorination			✓												
20M. Phenols, Total			✓												
DIOXIN															
2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6)			✓	**DESCRIBE RESULTS**											

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)			✓												
2V. Acrylonitrile (107-13-1)			✓												
3V. Benzene (71-43-2)	✓	✓		<0.005						1	mg/L				
4V. Bis (*Chloromethyl*) Ether (542-88-1)			✓												
5V. Bromoform (75-25-2)			✓												
6V. Carbon Tetrachloride (56-23-5)			✓												
7V. Chlorobenzene (108-90-7)			✓												
8V. Chlorodibromomethane (124-48-1)			✓												
9V. Chloroethane (75-00-3)			✓												
10V. 2-Chloroethylvinyl Ether (110-75-8)			✓												
11V. Chloroform (67-66-3)			✓												
12V. Dichlorobromomethane (75-27-4)			✓												
13V. Dichloro-difluoromethane (75-71-8)			✓												
14V. 1,1 – Dichloroethane (75-34-3)			✓												
15V. 1,2 – Dichloroethane (107-06-2)			✓												
16V. 1,1 – Dichloroethylene (75-35-4)			✓												
17V. 1,3 – Dichloropropane (78-87-5)			✓												
18V. 1,2 –Dichloropropylene (542-75-6)			✓												
19V. Ethylbenzene (100-41-4)	✓	✓		<0.005						1	mg/L				
20V. Methyl Bromide (74-83-9)			✓												
21V. Methyl Chloride (74-87-3)			✓												

CONTINUE ON PAGE 4

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER 003

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC.MS FRACTION – VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)	☐	☐	☑												
23V. 1,1,2,2 – Tetra-chloroethane (79-34-5)	☐	☐	☑												
24V. Tetrachloroethylene (127-18-4)	☐	☐	☑												
25V. Toluene (108-88-3)	☐	☐	☑												
26V. 1,2 – Trans Dichloroethylene (156-60-5)	☐	☐	☑												
27V. 1,1,1 – Tri – chloroethane (71-55-6)	☐	☐	☑												
28V. 1,1,2 – Tri-chloroethane (79-00-5)	☐	☐	☑												
29V. Trichloro – ethylene (79-01-6)	☐	☐	☑												
30V. Trichloro – fluoromethane (75-69-4)	☐	☐	☑												
31V. Vinyl Chloride (75-01-4)	☐	☐	☑												
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2 – Chlorophenol (95-57-8)	☐	☐	☑												
2A. 2,4 – Dichloro – phenol (120-83-2)	☐	☐	☑												
3A. 2,4 – Dimethyl – phenol (105-67-9)	☐	☐	☑												
4A. 4,6 – Dinitro - O-Cresol (534-52-1)	☐	☐	☑												
5A. 2,4 – Dinitro – phenol (51-28-5)	☐	☐	☑												
6A. 2-Nitrophenol (88-75-5)	☐	☐	☑												
7A. 4-Nitrophenol (100-02-7)	☐	☐	☑												
8A. P – Chloro – M Cresol (59-50-7)	☐	☐	☑												
9A. Pentachloro – phenol (87-86-5)	☐	☐	☑												
10A. Phenol (108-952)	☐	☐	☑												
11A. 2,4,6 – Trichloro-phenol (88-06-2)	☐	☐	☑												
12A. 2 - methyl – 4,6 dinitrophenol (534-52-1)	☐	☐	☑												

CONTINUE ON PAGE 5

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	☐	☐	☑												
2B. Acenaphtylene (208-96-8)	☐	☐	☑												
3B. Anthracene (120-12-7)	☐	☐	☑												
4B. Benzidine (92-87-5)	☐	☐	☑												
5B. Benzo (a) Anthracene (56-55-3)	☐	☐	☑												
6B. Benzo (a) Pyrene (50-32-8)	☐	☐	☑												
7B. 3,4 – Benzofluoranthene (205-99-2)	☐	☐	☑												
8B. Benzo (ghi) Perylene (191-24-2)	☐	☐	☑												
9B. Benzo (k) Fluoranthene (207-08-9)	☐	☐	☑												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	☐	☐	☑												
11B. Bis (2-Chloroethyl) Ether (111-44-4)	☐	☐	☑												
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)	☐	☐	☑												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	☐	☐	☑												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	☐	☐	☑												
15B. Butyl Benzyl Phthalate (85-68-7)	☐	☐	☑												
16B. 2-Chloronaphthalene (91-58-7)	☐	☐	☑												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	☐	☐	☑												
18B. Chrysene (218-01-9)	☐	☐	☑												
19B. Dibenzo (a.h) Anthracene (53-70-3)	☐	☐	☑												
20B. 1,2 – Dichlorobenzene (95-50-1)	☐	☐	☑												
21B. 1,3 – Dichlorobenzene (541-73-1)	☐	☐	☑												

CONTINUE ON PAGE 6

MO 780-1516 (02-12)

CONTINUED FROM PAGE 5

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	003

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
22B. 1, 4-Dichlorobenzene (106-46-7)	☐	☐	☑												
23B. 3, 3'-Dichlorobenzidine (91-94-1)	☐	☐	☑												
24B. Diethyl Phthalate (84-66-2)	☐	☐	☑												
25B. Dimethyl Phthalate (131-11-3)	☐	☐	☑												
26B. Di-N-butyl Phthalate (84-74-2)	☐	☐	☑												
27B. 2,4-Dinitrotoluene (121-14-2)	☐	☐	☑												
28B. 2,6-Dinitrotoluene (606-20-2)	☐	☐	☑												
29B. Di-N-Octyphthalate (117-84-0)	☐	☐	☑												
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	☐	☐	☑												
31B. Fluoranthene (206-44-0)	☐	☐	☑												
32B. Fluorene (86-73-7)	☐	☐	☑												
33B. Hexachlorobenzene (87-68-3)	☐	☐	☑												
34B. Hexachlorobutadiene (87-68-3)	☐	☐	☑												
35B. Hexachloro-cyclopentadiene (77-47-4)	☐	☐	☑												
36B. Hexachloroethane (67-72-1)	☐	☐	☑												
37B. Indeno (1,2,3-c-d) Pyrene (193-39-5)	☐	☐	☑												
38B. Isophorone (78-59-1)	☐	☐	☑												
39B. Naphthalene (91-20-3)	☐	☐	☑												
40B. Nitrobenzene (98-95-3)	☐	☐	☑												
41B. N-Nitro-sodimethylamine (62-75-9)	☐	☐	☑												

CONTINUE ON PAGE 7

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TES-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
42B. N-Nitroso N-Propylamine (621-64-7)	☐	☐	☑												
43B. N-Nitro-sodiphenylamine (86-30-6)	☐	☐	☑												
44B. Phenanthrene (85-01-8)	☐	☐	☑												
45B. Pyrene (129-00-0)	☐	☐	☑												
46B. 1,2,4-Tri chlorobenzene (120-82-1)	☐	☐	☑												
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	☐	☐	☑												
2P. α-BHC (319-84-6)	☐	☐	☑												
3P. β-BHC (319-84-6)	☐	☐	☑												
4P. γ-BHC (58-89-9)	☐	☐	☑												
5P. δ-BHC (319-86-8)	☐	☐	☑												
6P. Chlordane (57-74-9)	☐	☐	☑												
7P. 4,4'-DDT (50-29-3)	☐	☐	☑												
8P. 4,4'-DDE (72-55-9)	☐	☐	☑												
9P. 4,4'-DDD (72-54-8)	☐	☐	☑												
10P. Dieldrin (60-57-1)	☐	☐	☑												
11P. α-Endosulfan (115-29-7)	☐	☐	☑												
12P. β-Endosultan (115-29-7)	☐	☐	☑												
13P. Endosulfan Sulfate (1031-07-8)	☐	☐	☑												
14P. Endrin (72-20-8)	☐	☐	☑												
15P. Endrin Aldehyde (7421-93-4)	☐	☐	☑												
16P. Heptachlor (76-44-8)	☐	☐	☑												

CONTINUED ON PAGE 8

CONTINUED FROM PAGE 7

NPDES # (*IF ASSIGNED*)

OUTFALL NUMBER 003

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT						D. NO. OF ANALYSES	4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)			A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICISES *(continued)*															
17P. Heptachlor Epoxide (1024-57-3)			✓												
18P. PCB-1242 (53469-21-9)			✓												
19P. PBC-1254 (11097-69-1)			✓												
20P. PCB-1221 (11104-28-2)			✓												
21P. PCB-1232 (11141-16-5)			✓												
22P. PCB-1248 (12672-29-6)			✓												
23P. PCB-1260 (11096-82-5)			✓												
24P. PCB-1016 (12674-11-2)			✓												
25P. Toxaphene (8001-35-2)			✓												
J. RADIOACTIVITY															
(1) Alpha Total			✓												
(2) Beta Total			✓												
(3) Radium Total			✓												
(4) Radium 226 Total			✓												

APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES

TABLE II

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	004

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (*all seven pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TEST-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-9)	✓		✓	<0.050						1	mg/L				
2M. Arsenic, Total (7440-38-2)	✓	✓		<0.025						1	mg/L				
3M. Beryllium, Total (7440-41-7)	✓	✓		<0.0005						1	mg/L				
4M. Cadmium, Total (7440-43-9)	✓	✓		<0.002						1	mg/L				
5M. Chromium III (16065-83-1)	✓	✓		<0.005						1	mg/L				
6M. Chromium VI (18540-29-9)	✓	✓		<0.005						1	mg/L				
7M. Copper, Total (7440-50-8)	✓	✓		<0.005						1	mg/L				
8M. Lead, Total (7439-92-1)	✓	✓		<0.015						1	mg/L				
9M. Magnesium Total (7439-95-4)			✓												
10M. Mercury, Total (7439-97-6)	✓	✓		<0.0002						1	mg/L				
11M. Molybdenum Total (7439-98-7)			✓												
12M. Nickel, Total (7440-02-0)	✓	✓		<0.005						1	mg/L				
13M. Selenium, Total (7782-49-2)	✓	✓		<0.010						1	mg/L				
14M. Silver, Total (7440-22-4)	✓		✓	<0.005						1	mg/L				
15M. Thallium, Total (7440-28-0)	✓		✓	<0.020						1	mg/L				
16M. Tin Total (7440-31-5)			✓												
17M. Titanium Total (7440-32-6)			✓												
18M. Zinc, Total (7440-66-6)	✓	✓		<0.010						1	mg/L				

MO 780-1516 (06-13)

CONTINUED FROM PAGE 3

19M. Cyanide, Amenable to Chlorination			✓													
20M. Phenols, Total			✓													
DIOXIN																
2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6)			✓	**DESCRIBE RESULTS**												

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)			✓												
2V. Acrylonitrile (107-13-1)			✓												
3V. Benzene (71-43-2)	✓	✓		<0.002						1	mg/L				
4V. Bis (*Chloromethyl*) Ether (542-88-1)			✓												
5V. Bromoform (75-25-2)			✓												
6V. Carbon Tetrachloride (56-23-5)			✓												
7V. Chlorobenzene (108-90-7)			✓												
8V. Chlorodibromomethane (124-48-1)			✓												
9V. Chloroethane (75-00-3)			✓												
10V. 2-Chloroethylvinyl Ether (110-75-8)			✓												
11V. Chloroform (67-66-3)			✓												
12V. Dichlorobromomethane (75-27-4)			✓												
13V. Dichloro-difluoromethane (75-71-8)			✓												
14V. 1,1 – Dichloroethane (75-34-3)			✓												
15V. 1,2 – Dichloroethane (107-06-2)			✓												
16V. 1,1 – Dichloroethylene (75-35-4)			✓												
17V. 1,3 – Dichloropropane (78-87-5)			✓												
18V. 1,2 –Dichloropropylene (542-75-6)			✓												
19V. Ethylbenzene (100-41-4)	✓	✓		<0.005						1	mg/L				
20V. Methyl Bromide (74-83-9)			✓												
21V. Methyl Chloride (74-87-3)			✓												

CONTINUE ON PAGE 4

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER 004

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING RE-QUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC.MS FRACTION – VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)	☐	☐	☑												
23V. 1,1,2,2 – Tetra-chloroethane (79-34-5)	☐	☐	☑												
24V. Tetrachloroethylene (127-18-4)	☐	☐	☑												
25V. Toluene (108-88-3)	☐	☐	☑												
26V. 1,2 – Trans Dichloroethylene (156-60-5)	☐	☐	☑												
27V. 1,1,1 – Tri – chloroethane (71-55-6)	☐	☐	☑												
28V. 1,1,2 – Tri-chloroethane (79-00-5)	☐	☐	☑												
29V. Trichloro – ethylene (79-01-6)	☐	☐	☑												
30V. Trichloro – fluoromethane (75-69-4)	☐	☐	☑												
31V. Vinyl Chloride (75-01-4)	☐	☐	☑												
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2 – Chlorophenol (95-57-8)	☐	☐	☑												
2A. 2,4 – Dichloro – phenol (120-83-2)	☐	☐	☑												
3A. 2,4 – Dimethyl – phenol (105-67-9)	☐	☐	☑												
4A. 4,6 – Dinitro - O-Cresol (534-52-1)	☐	☐	☑												
5A. 2,4 – Dinitro – phenol (51-28-5)	☐	☐	☑												
6A. 2-Nitrophenol (88-75-5)	☐	☐	☑												
7A. 4-Nitrophenol (100-02-7)	☐	☐	☑												
8A. P – Chloro – M Cresol (59-50-7)	☐	☐	☑												
9A. Pentachloro – phenol (87-86-5)	☐	☐	☑												
10A. Phenol (108-952)	☐	☐	☑												
11A. 2,4,6 – Trichloro-phenol (88-06-2)	☐	☐	☑												
12A. 2 - methyl – 4,6 dinitrophenol (534-52-1)	☐	☐	☑												

CONTINUE ON PAGE 5

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	☐	☐	☑												
2B. Acenaphtylene (208-96-8)	☐	☐	☑												
3B. Anthracene (120-12-7)	☐	☐	☑												
4B. Benzidine (92-87-5)	☐	☐	☑												
5B. Benzo (a) Anthracene (56-55-3)	☐	☐	☑												
6B. Benzo (a) Pyrene (50-32-8)	☐	☐	☑												
7B. 3,4 – Benzofluoranthene (205-99-2)	☐	☐	☑												
8B. Benzo (ghi) Perylene (191-24-2)	☐	☐	☑												
9B. Benzo (k) Fluoranthene (207-08-9)	☐	☐	☑												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	☐	☐	☑												
11B. Bis (2-Chloroethyl) Ether (111-44-4)	☐	☐	☑												
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)	☐	☐	☑												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	☐	☐	☑												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	☐	☐	☑												
15B. Butyl Benzyl Phthalate (85-68-7)	☐	☐	☑												
16B. 2-Chloronaphthalene (91-58-7)	☐	☐	☑												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	☐	☐	☑												
18B. Chrysene (218-01-9)	☐	☐	☑												
19B. Dibenzo (a.h) Anthracene (53-70-3)	☐	☐	☑												
20B. 1,2 – Dichlorobenzene (95-50-1)	☐	☐	☑												
21B. 1,3 – Dichlorobenzene (541-73-1)	☐	☐	☑												

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CONTINUED FROM PAGE 5

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	004

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT						D. NO. OF ANALYSES	4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)			A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
22B. 1, 4-Dichlorobenzene (106-46-7)	☐	☐	☑												
23B. 3, 3'-Dichlorobenzidine (91-94-1)	☐	☐	☑												
24B. Diethyl Phthalate (84-66-2)	☐	☐	☑												
25B. Dimethyl Phthalate (131-11-3)	☐	☐	☑												
26B. Di-N-butyl Phthalate (84-74-2)	☐	☐	☑												
27B. 2,4-Dinitrotoluene (121-14-2)	☐	☐	☑												
28B. 2,6-Dinitrotoluene (606-20-2)	☐	☐	☑												
29B. Di-N-Octyphthalate (117-84-0)	☐	☐	☑												
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	☐	☐	☑												
31B. Fluoranthene (206-44-0)	☐	☐	☑												
32B. Fluorene (86-73-7)	☐	☐	☑												
33B. Hexachlorobenzene (87-68-3)	☐	☐	☑												
34B. Hexachlorobutadiene (87-68-3)	☐	☐	☑												
35B. Hexachloro-cyclopentadiene (77-47-4)	☐	☐	☑												
36B. Hexachloroethane (67-72-1)	☐	☐	☑												
37B. Indeno (1,2,3-c-d) Pyrene (193-39-5)	☐	☐	☑												
38B. Isophorone (78-59-1)	☐	☐	☑												
39B. Naphthalene (91-20-3)	☐	☐	☑												
40B. Nitrobenzene (98-95-3)	☐	☐	☑												
41B. N-Nitro-sodimethylamine (62-75-9)	☐	☐	☑												

CONTINUE ON PAGE 7

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TES-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
42B. N-Nitroso N-Propylamine (621-64-7)	☐	☐	☑												
43B. N-Nitro-sodiphenylamine (86-30-6)	☐	☐	☑												
44B. Phenanthrene (85-01-8)	☐	☐	☑												
45B. Pyrene (129-00-0)	☐	☐	☑												
46B. 1,2,4-Tri chlorobenzene (120-82-1)	☐	☐	☑												
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	☐	☐	☑												
2P. α-BHC (319-84-6)	☐	☐	☑												
3P. β-BHC (319-84-6)	☐	☐	☑												
4P. γ-BHC (58-89-9)	☐	☐	☑												
5P. δ-BHC (319-86-8)	☐	☐	☑												
6P. Chlordane (57-74-9)	☐	☐	☑												
7P. 4,4'-DDT (50-29-3)	☐	☐	☑												
8P. 4,4'-DDE (72-55-9)	☐	☐	☑												
9P. 4,4'-DDD (72-54-8)	☐	☐	☑												
10P. Dieldrin (60-57-1)	☐	☐	☑												
11P. α-Endosulfan (115-29-7)	☐	☐	☑												
12P. β-Endosultan (115-29-7)	☐	☐	☑												
13P. Endosulfan Sulfate (1031-07-8)	☐	☐	☑												
14P. Endrin (72-20-8)	☐	☐	☑												
15P. Endrin Aldehyde (7421-93-4)	☐	☐	☑												
16P. Heptachlor (76-44-8)	☐	☐	☑												

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CONTINUED FROM PAGE 7

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	004

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICISES *(continued)*															
17P. Heptachlor Epoxide (1024-57-3)			✓												
18P. PCB-1242 (53469-21-9)			✓												
19P. PBC-1254 (11097-69-1)			✓												
20P. PCB-1221 (11104-28-2)			✓												
21P. PCB-1232 (11141-16-5)			✓												
22P. PCB-1248 (12672-29-6)			✓												
23P. PCB-1260 (11096-82-5)			✓												
24P. PCB-1016 (12674-11-2)			✓												
25P. Toxaphene (8001-35-2)			✓												
J. RADIOACTIVITY															
(1) Alpha Total			✓												
(2) Beta Total			✓												
(3) Radium Total			✓												
(4) Radium 226 Total			✓												

APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES

TABLE II

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	005

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (*all seven pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TEST-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-9)	✓		✓	<50						1	ug/L				
2M. Arsenic, Total (7440-38-2)	✓	✓		10	0.048					1	ug/L	lbs			
3M. Beryllium, Total (7440-41-7)	✓	✓		1.3	0.006					1	ug/L	lbs			
4M. Cadmium, Total (7440-43-9)	✓	✓		0.4	0.002					1	ug/L	lbs			
5M. Chromium III (16065-83-1)	✓	✓		28	0.135					1	ug/L	lbs			
6M. Chromium VI (18540-29-9)	✓	✓		<250						1	ug/L				
7M. Copper, Total (7440-50-8)	✓	✓		20.3	0.098					1	ug/L	lbs			
8M. Lead, Total (7439-92-1)	✓	✓		15.6	0.075					1	ug/L	lbs			
9M. Magnesium Total (7439-95-4)			✓												
10M. Mercury, Total (7439-97-6)	✓	✓		<0.020						1	ug/L				
11M. Molybdenum Total (7439-98-7)			✓												
12M. Nickel, Total (7440-02-0)	✓	✓		26.9	0.129					1	ug/L	lbs			
13M. Selenium, Total (7782-49-2)	✓	✓		<40						1	ug/L				
14M. Silver, Total (7440-22-4)	✓		✓	<5						1	ug/L				
15M. Thallium, Total (7440-28-0)	✓		✓	<50						1	ug/L				
16M. Tin Total (7440-31-5)			✓												
17M. Titanium Total (7440-32-6)			✓												
18M. Zinc, Total (7440-66-6)	✓	✓		74.4	0.358					1	ug/L	lbs			

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CONTINUED FROM PAGE 3

19M. Cyanide, Amenable to Chlorination	☐	☐	☑												
20M. Phenols, Total	☐	☐	☑												

DIOXIN

2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6)	☐	☐	☑	**DESCRIBE RESULTS**

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	☐	☐	☑												
2V. Acrylonitrile (107-13-1)	☐	☐	☑												
3V. Benzene (71-43-2)	☑	☑	☐	0.9	0.004					1	ug/L	lbs			
4V. Bis (*Chloromethyl*) Ether (542-88-1)	☐	☐	☑												
5V. Bromoform (75-25-2)	☐	☐	☑												
6V. Carbon Tetrachloride (56-23-5)	☐	☐	☑												
7V. Chlorobenzene (108-90-7)	☐	☐	☑												
8V. Chlorodibromomethane (124-48-1)	☐	☐	☑												
9V. Chloroethane (75-00-3)	☐	☐	☑												
10V. 2-Chloroethylvinyl Ether (110-75-8)	☐	☐	☑												
11V. Chloroform (67-66-3)	☐	☐	☑												
12V. Dichlorobromomethane (75-27-4)	☐	☐	☑												
13V. Dichloro-difluoromethane (75-71-8)	☐	☐	☑												
14V. 1,1 – Dichloroethane (75-34-3)	☐	☐	☑												
15V. 1,2 – Dichloroethane (107-06-2)	☐	☐	☑												
16V. 1,1 – Dichloroethylene (75-35-4)	☐	☐	☑												
17V. 1,3 – Dichloropropane (78-87-5)	☐	☐	☑												
18V. 1,2 –Dichloropropylene (542-75-6)	☐	☐	☑												
19V. Ethylbenzene (100-41-4)	☑	☑	☐	<5						1	ug/L				
20V. Methyl Bromide (74-83-9)	☐	☐	☑												
21V. Methyl Chloride (74-87-3)	☐	☐	☑												

CONTINUE ON PAGE 4

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER 005

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING RE-QUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC.MS FRACTION – VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)	☐	☐	☑												
23V. 1,1,2,2 – Tetra-chloroethane (79-34-5)	☐	☐	☑												
24V. Tetrachloroethylene (127-18-4)	☐	☐	☑												
25V. Toluene (108-88-3)	☐	☐	☑												
26V. 1,2 – Trans Dichloroethylene (156-60-5)	☐	☐	☑												
27V. 1,1,1 – Tri – chloroethane (71-55-6)	☐	☐	☑												
28V. 1,1,2 – Tri-chloroethane (79-00-5)	☐	☐	☑												
29V. Trichloro – ethylene (79-01-6)	☐	☐	☑												
30V. Trichloro – fluoromethane (75-69-4)	☐	☐	☑												
31V. Vinyl Chloride (75-01-4)	☐	☐	☑												
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2 – Chlorophenol (95-57-8)	☐	☐	☑												
2A. 2,4 – Dichloro – phenol (120-83-2)	☐	☐	☑												
3A. 2,4 – Dimethyl – phenol (105-67-9)	☐	☐	☑												
4A. 4,6 – Dinitro - O-Cresol (534-52-1)	☐	☐	☑												
5A. 2,4 – Dinitro – phenol (51-28-5)	☐	☐	☑												
6A. 2-Nitrophenol (88-75-5)	☐	☐	☑												
7A. 4-Nitrophenol (100-02-7)	☐	☐	☑												
8A. P – Chloro – M Cresol (59-50-7)	☐	☐	☑												
9A. Pentachloro – phenol (87-86-5)	☐	☐	☑												
10A. Phenol (108-952)	☐	☐	☑												
11A. 2,4,6 – Trichloro-phenol (88-06-2)	☐	☐	☑												
12A. 2 - methyl – 4,6 dinitrophenol (534-52-1)	☐	☐	☑												

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CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	☐	☐	☑												
2B. Acenaphtylene (208-96-8)	☐	☐	☑												
3B. Anthracene (120-12-7)	☐	☐	☑												
4B. Benzidine (92-87-5)	☐	☐	☑												
5B. Benzo (a) Anthracene (56-55-3)	☐	☐	☑												
6B. Benzo (a) Pyrene (50-32-8)	☐	☐	☑												
7B. 3,4 – Benzofluoranthene (205-99-2)	☐	☐	☑												
8B. Benzo (ghi) Perylene (191-24-2)	☐	☐	☑												
9B. Benzo (k) Fluoranthene (207-08-9)	☐	☐	☑												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	☐	☐	☑												
11B. Bis (2-Chloroethyl) Ether (111-44-4)	☐	☐	☑												
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)	☐	☐	☑												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	☐	☐	☑												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	☐	☐	☑												
15B. Butyl Benzyl Phthalate (85-68-7)	☐	☐	☑												
16B. 2-Chloronaphthalene (91-58-7)	☐	☐	☑												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	☐	☐	☑												
18B. Chrysene (218-01-9)	☐	☐	☑												
19B. Dibenzo (a.h) Anthracene (53-70-3)	☐	☐	☑												
20B. 1,2 – Dichlorobenzene (95-50-1)	☐	☐	☑												
21B. 1,3 – Dichlorobenzene (541-73-1)	☐	☐	☑												

CONTINUE ON PAGE 6

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NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	005

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
22B. 1, 4-Dichlorobenzene (106-46-7)	☐	☐	☑												
23B. 3, 3'-Dichlorobenzidine (91-94-1)	☐	☐	☑												
24B. Diethyl Phthalate (84-66-2)	☐	☐	☑												
25B. Dimethyl Phthalate (131-11-3)	☐	☐	☑												
26B. Di-N-butyl Phthalate (84-74-2)	☐	☐	☑												
27B. 2,4-Dinitrotoluene (121-14-2)	☐	☐	☑												
28B. 2,6-Dinitrotoluene (606-20-2)	☐	☐	☑												
29B. Di-N-Octyphthalate (117-84-0)	☐	☐	☑												
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	☐	☐	☑												
31B. Fluoranthene (206-44-0)	☐	☐	☑												
32B. Fluorene (86-73-7)	☐	☐	☑												
33B. Hexachlorobenzene (87-68-3)	☐	☐	☑												
34B. Hexachlorobutadiene (87-68-3)	☐	☐	☑												
35B. Hexachloro-cyclopentadiene (77-47-4)	☐	☐	☑												
36B. Hexachloroethane (67-72-1)	☐	☐	☑												
37B. Indeno (1,2,3-c-d) Pyrene (193-39-5)	☐	☐	☑												
38B. Isophorone (78-59-1)	☐	☐	☑												
39B. Naphthalene (91-20-3)	☐	☐	☑												
40B. Nitrobenzene (98-95-3)	☐	☐	☑												
41B. N-Nitro-sodimethylamine (62-75-9)	☐	☐	☑												

CONTINUE ON PAGE 7

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TES-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
42B. N-Nitroso N-Propylamine (621-64-7)	☐	☐	☑												
43B. N-Nitro-sodiphenylamine (86-30-6)	☐	☐	☑												
44B. Phenanthrene (85-01-8)	☐	☐	☑												
45B. Pyrene (129-00-0)	☐	☐	☑												
46B. 1,2,4-Tri chlorobenzene (120-82-1)	☐	☐	☑												
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	☐	☐	☑												
2P. α-BHC (319-84-6)	☐	☐	☑												
3P. β-BHC (319-84-6)	☐	☐	☑												
4P. γ-BHC (58-89-9)	☐	☐	☑												
5P. δ-BHC (319-86-8)	☐	☐	☑												
6P. Chlordane (57-74-9)	☐	☐	☑												
7P. 4,4'-DDT (50-29-3)	☐	☐	☑												
8P. 4,4'-DDE (72-55-9)	☐	☐	☑												
9P. 4,4'-DDD (72-54-8)	☐	☐	☑												
10P. Dieldrin (60-57-1)	☐	☐	☑												
11P. α-Endosulfan (115-29-7)	☐	☐	☑												
12P. β-Endosultan (115-29-7)	☐	☐	☑												
13P. Endosulfan Sulfate (1031-07-8)	☐	☐	☑												
14P. Endrin (72-20-8)	☐	☐	☑												
15P. Endrin Aldehyde (7421-93-4)	☐	☐	☑												
16P. Heptachlor (76-44-8)	☐	☐	☑												

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CONTINUED FROM PAGE 7

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	005

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICISES *(continued)*															
17P. Heptachlor Epoxide (1024-57-3)			✓												
18P. PCB-1242 (53469-21-9)			✓												
19P. PBC-1254 (11097-69-1)			✓												
20P. PCB-1221 (11104-28-2)			✓												
21P. PCB-1232 (11141-16-5)			✓												
22P. PCB-1248 (12672-29-6)			✓												
23P. PCB-1260 (11096-82-5)			✓												
24P. PCB-1016 (12674-11-2)			✓												
25P. Toxaphene (8001-35-2)			✓												
J. RADIOACTIVITY															
(1) Alpha Total			✓												
(2) Beta Total			✓												
(3) Radium Total			✓												
(4) Radium 226 Total			✓												

APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES

TABLE II

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	007

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (*all seven pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TEST-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-9)	✓		✓	<50						1	ug/L				
2M. Arsenic, Total (7440-38-2)	✓	✓		<25						1	ug/L				
3M. Beryllium, Total (7440-41-7)	✓	✓		<0.50						1	ug/L				
4M. Cadmium, Total (7440-43-9)	✓	✓		0.5	0.003					1	ug/L	lbs			
5M. Chromium III (16065-83-1)	✓	✓		6	0.0354					1	ug/L	lbs			
6M. Chromium VI (18540-29-9)	✓	✓		<25						1	ug/L				
7M. Copper, Total (7440-50-8)	✓	✓		3.3	0.0195					1	ug/L	lbs			
8M. Lead, Total (7439-92-1)	✓	✓		12	0.0708					1	ug/L	lbs			
9M. Magnesium Total (7439-95-4)			✓												
10M. Mercury, Total (7439-97-6)	✓	✓		0.272	0.0016					1	ug/L	lbs			
11M. Molybdenum Total (7439-98-7)			✓												
12M. Nickel, Total (7440-02-0)	✓	✓		11.4	0.0673					1	ug/L	lbs			
13M. Selenium, Total (7782-49-2)	✓	✓		<40						1	ug/L				
14M. Silver, Total (7440-22-4)	✓		✓	<5						1	ug/L				
15M. Thallium, Total (7440-28-0)	✓		✓	<50						1	ug/L				
16M. Tin Total (7440-31-5)			✓												
17M. Titanium Total (7440-32-6)			✓												
18M. Zinc, Total (7440-66-6)	✓	✓		79	0.466					1	ug/L	lbs			

MO 780-1516 (06-13)

CONTINUED FROM PAGE 3

19M. Cyanide, Amenable to Chlorination			✓												
20M. Phenols, Total			✓												
DIOXIN															
2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6)			✓	**DESCRIBE RESULTS**											

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)			✓												
2V. Acrylonitrile (107-13-1)			✓												
3V. Benzene (71-43-2)	✓	✓		<2						1	ug/L				
4V. Bis (*Chloromethyl*) Ether (542-88-1)			✓												
5V. Bromoform (75-25-2)			✓												
6V. Carbon Tetrachloride (56-23-5)			✓												
7V. Chlorobenzene (108-90-7)			✓												
8V. Chlorodibromomethane (124-48-1)			✓												
9V. Chloroethane (75-00-3)			✓												
10V. 2-Chloroethylvinyl Ether (110-75-8)			✓												
11V. Chloroform (67-66-3)			✓												
12V. Dichlorobromomethane (75-27-4)			✓												
13V. Dichloro-difluoromethane (75-71-8)			✓												
14V. 1,1 – Dichloroethane (75-34-3)			✓												
15V. 1,2 – Dichloroethane (107-06-2)			✓												
16V. 1,1 – Dichloroethylene (75-35-4)			✓												
17V. 1,3 – Dichloropropane (78-87-5)			✓												
18V. 1,2 –Dichloropropylene (542-75-6)			✓												
19V. Ethylbenzene (100-41-4)	✓	✓		<5						1	ug/L				
20V. Methyl Bromide (74-83-9)			✓												
21V. Methyl Chloride (74-87-3)			✓												

CONTINUE ON PAGE 4

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER 007

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING RE-QUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC.MS FRACTION – VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)	☐	☐	☑												
23V. 1,1,2,2 – Tetra-chloroethane (79-34-5)	☐	☐	☑												
24V. Tetrachloroethylene (127-18-4)	☐	☐	☑												
25V. Toluene (108-88-3)	☐	☐	☑												
26V. 1,2 – Trans Dichloroethylene (156-60-5)	☐	☐	☑												
27V. 1,1,1 – Tri – chloroethane (71-55-6)	☐	☐	☑												
28V. 1,1,2 – Tri-chloroethane (79-00-5)	☐	☐	☑												
29V. Trichloro – ethylene (79-01-6)	☐	☐	☑												
30V. Trichloro – fluoromethane (75-69-4)	☐	☐	☑												
31V. Vinyl Chloride (75-01-4)	☐	☐	☑												
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2 – Chlorophenol (95-57-8)	☐	☐	☑												
2A. 2,4 – Dichloro – phenol (120-83-2)	☐	☐	☑												
3A. 2,4 – Dimethyl – phenol (105-67-9)	☐	☐	☑												
4A. 4,6 – Dinitro - O-Cresol (534-52-1)	☐	☐	☑												
5A. 2,4 – Dinitro – phenol (51-28-5)	☐	☐	☑												
6A. 2-Nitrophenol (88-75-5)	☐	☐	☑												
7A. 4-Nitrophenol (100-02-7)	☐	☐	☑												
8A. P – Chloro – M Cresol (59-50-7)	☐	☐	☑												
9A. Pentachloro – phenol (87-86-5)	☐	☐	☑												
10A. Phenol (108-952)	☐	☐	☑												
11A. 2,4,6 – Trichloro-phenol (88-06-2)	☐	☐	☑												
12A. 2 - methyl – 4,6 dinitrophenol (534-52-1)	☐	☐	☑												

CONTINUE ON PAGE 5

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	☐	☐	☑												
2B. Acenaphtylene (208-96-8)	☐	☐	☑												
3B. Anthracene (120-12-7)	☐	☐	☑												
4B. Benzidine (92-87-5)	☐	☐	☑												
5B. Benzo (a) Anthracene (56-55-3)	☐	☐	☑												
6B. Benzo (a) Pyrene (50-32-8)	☐	☐	☑												
7B. 3,4 – Benzofluoranthene (205-99-2)	☐	☐	☑												
8B. Benzo (ghi) Perylene (191-24-2)	☐	☐	☑												
9B. Benzo (k) Fluoranthene (207-08-9)	☐	☐	☑												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	☐	☐	☑												
11B. Bis (2-Chloroethyl) Ether (111-44-4)	☐	☐	☑												
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)	☐	☐	☑												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	☐	☐	☑												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	☐	☐	☑												
15B. Butyl Benzyl Phthalate (85-68-7)	☐	☐	☑												
16B. 2-Chloronaphthalene (91-58-7)	☐	☐	☑												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	☐	☐	☑												
18B. Chrysene (218-01-9)	☐	☐	☑												
19B. Dibenzo (a.h) Anthracene (53-70-3)	☐	☐	☑												
20B. 1,2 – Dichlorobenzene (95-50-1)	☐	☐	☑												
21B. 1,3 – Dichlorobenzene (541-73-1)	☐	☐	☑												

CONTINUE ON PAGE 6

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NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	007

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
22B. 1, 4-Dichlorobenzene (106-46-7)	☐	☐	☑												
23B. 3, 3'-Dichlorobenzidine (91-94-1)	☐	☐	☑												
24B. Diethyl Phthalate (84-66-2)	☐	☐	☑												
25B. Dimethyl Phthalate (131-11-3)	☐	☐	☑												
26B. Di-N-butyl Phthalate (84-74-2)	☐	☐	☑												
27B. 2,4-Dinitrotoluene (121-14-2)	☐	☐	☑												
28B. 2,6-Dinitrotoluene (606-20-2)	☐	☐	☑												
29B. Di-N-Octyphthalate (117-84-0)	☐	☐	☑												
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	☐	☐	☑												
31B. Fluoranthene (206-44-0)	☐	☐	☑												
32B. Fluorene (86-73-7)	☐	☐	☑												
33B. Hexachlorobenzene (87-68-3)	☐	☐	☑												
34B. Hexachlorobutadiene (87-68-3)	☐	☐	☑												
35B. Hexachloro-cyclopentadiene (77-47-4)	☐	☐	☑												
36B. Hexachloroethane (67-72-1)	☐	☐	☑												
37B. Indeno (1,2,3-c-d) Pyrene (193-39-5)	☐	☐	☑												
38B. Isophorone (78-59-1)	☐	☐	☑												
39B. Naphthalene (91-20-3)	☐	☐	☑												
40B. Nitrobenzene (98-95-3)	☐	☐	☑												
41B. N-Nitro-sodimethylamine (62-75-9)	☐	☐	☑												

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CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TES-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
42B. N-Nitroso N-Propylamine (621-64-7)	☐	☐	☑												
43B. N-Nitro-sodiphenylamine (86-30-6)	☐	☐	☑												
44B. Phenanthrene (85-01-8)	☐	☐	☑												
45B. Pyrene (129-00-0)	☐	☐	☑												
46B. 1,2,4-Tri chlorobenzene (120-82-1)	☐	☐	☑												
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	☐	☐	☑												
2P. α-BHC (319-84-6)	☐	☐	☑												
3P. β-BHC (319-84-6)	☐	☐	☑												
4P. γ-BHC (58-89-9)	☐	☐	☑												
5P. δ-BHC (319-86-8)	☐	☐	☑												
6P. Chlordane (57-74-9)	☐	☐	☑												
7P. 4,4'-DDT (50-29-3)	☐	☐	☑												
8P. 4,4'-DDE (72-55-9)	☐	☐	☑												
9P. 4,4'-DDD (72-54-8)	☐	☐	☑												
10P. Dieldrin (60-57-1)	☐	☐	☑												
11P. α-Endosulfan (115-29-7)	☐	☐	☑												
12P. β-Endosultan (115-29-7)	☐	☐	☑												
13P. Endosulfan Sulfate (1031-07-8)	☐	☐	☑												
14P. Endrin (72-20-8)	☐	☐	☑												
15P. Endrin Aldehyde (7421-93-4)	☐	☐	☑												
16P. Heptachlor (76-44-8)	☐	☐	☑												

CONTINUED ON PAGE 8

MO 780-1516 (06-13)

CONTINUED FROM PAGE 7

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	007

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICISES *(continued)*															
17P. Heptachlor Epoxide (1024-57-3)			✓												
18P. PCB-1242 (53469-21-9)			✓												
19P. PBC-1254 (11097-69-1)			✓												
20P. PCB-1221 (11104-28-2)			✓												
21P. PCB-1232 (11141-16-5)			✓												
22P. PCB-1248 (12672-29-6)			✓												
23P. PCB-1260 (11096-82-5)			✓												
24P. PCB-1016 (12674-11-2)			✓												
25P. Toxaphene (8001-35-2)			✓												
J. RADIOACTIVITY															
(1) Alpha Total			✓												
(2) Beta Total			✓												
(3) Radium Total			✓												
(4) Radium 226 Total			✓												

APPLICATION FOR DISCHARGE PERMIT
FORM D – PRIMARY INDUSTRIES

TABLE II

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	008

1.30 If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (*all seven pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TEST-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-9)	✓		✓	NA											
2M. Arsenic, Total (7440-38-2)	✓	✓		NA											
3M. Beryllium, Total (7440-41-7)	✓	✓		NA											
4M. Cadmium, Total (7440-43-9)	✓	✓		NA											
5M. Chromium III (16065-83-1)	✓	✓		NA											
6M. Chromium VI (18540-29-9)	✓	✓		NA											
7M. Copper, Total (7440-50-8)	✓	✓		NA											
8M. Lead, Total (7439-92-1)	✓	✓		NA											
9M. Magnesium Total (7439-95-4)			✓	NA											
10M. Mercury, Total (7439-97-6)	✓	✓		NA											
11M. Molybdenum Total (7439-98-7)			✓	NA											
12M. Nickel, Total (7440-02-0)	✓	✓		NA											
13M. Selenium, Total (7782-49-2)	✓	✓		NA											
14M. Silver, Total (7440-22-4)	✓		✓	NA											
15M. Thallium, Total (7440-28-0)	✓		✓	NA											
16M. Tin Total (7440-31-5)			✓	NA											
17M. Titanium Total (7440-32-6)			✓	NA											
18M. Zinc, Total (7440-66-6)	✓	✓		NA											

*Outfall #008 has yet to be surveyed and developed. No sample has been taken for this location.

CONTINUED FROM PAGE 3

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X" A. TESTING REQUIRED	2. MARK "X" B. BELIEVED PRESENT	2. MARK "X" C. BELIEVED ABSENT	3. EFFLUENT A. MAXIMUM DAILY VALUE (1) CONCENTRATION	3. EFFLUENT A. MAXIMUM DAILY VALUE (2) MASS	3. EFFLUENT B. MAXIMUM 30 DAY VALUE (*if available*) (1) CONCENTRATION	3. EFFLUENT B. MAXIMUM 30 DAY VALUE (2) MASS	3. EFFLUENT C. LONG TERM AVRG. VALUE (*if available*) (1) CONCENTRATION	3. EFFLUENT C. LONG TERM AVRG. VALUE (2) MASS	3. EFFLUENT D. NO. OF ANALYSES	4. UNITS A. CONCENTRATION	4. UNITS B. MASS	5. INTAKE (*optional*) A. LONG TERM AVRG. VALUE (1) CONCENTRATION	5. INTAKE (*optional*) A. LONG TERM AVRG. VALUE (2) MASS	5. INTAKE (*optional*) B. NO OF ANALYSES
19M. Cyanide, Amenable to Chlorination	☐	☐	☑	NA											
20M. Phenols, Total	☐	☐	☑	NA											
DIOXIN															
2,3,7,8 – Tetra – chlorodibenzo-P-Dioxin (1764-01-6)	☐	☐	☑	**DESCRIBE RESULTS** NA											
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	☐	☐	☑	NA											
2V. Acrylonitrile (107-13-1)	☐	☐	☑	NA											
3V. Benzene (71-43-2)	☑	☑	☐	NA											
4V. Bis (*Chloromethyl*) Ether (542-88-1)	☐	☐	☑	NA											
5V. Bromoform (75-25-2)	☐	☐	☑	NA											
6V. Carbon Tetrachloride (56-23-5)	☐	☐	☑	NA											
7V. Chlorobenzene (108-90-7)	☐	☐	☑	NA											
8V. Chlorodibromomethane (124-48-1)	☐	☐	☑	NA											
9V. Chloroethane (75-00-3)	☐	☐	☑	NA											
10V. 2-Chloroethylvinyl Ether (110-75-8)	☐	☐	☑	NA											
11V. Chloroform (67-66-3)	☐	☐	☑	NA											
12V. Dichlorobromomethane (75-27-4)	☐	☐	☑	NA											
13V. Dichloro-difluoromethane (75-71-8)	☐	☐	☑	NA											
14V. 1,1 – Dichloroethane (75-34-3)	☐	☐	☑	NA											
15V. 1,2 – Dichloroethane (107-06-2)	☐	☐	☑	NA											
16V. 1,1 – Dichloroethylene (75-35-4)	☐	☐	☑	NA											
17V. 1,3 – Dichloropropane (78-87-5)	☐	☐	☑	NA											
18V. 1,2 –Dichloropropylene (542-75-6)	☐	☐	☑	NA											
19V. Ethylbenzene (100-41-4)	☑	☑	☐	NA											
20V. Methyl Bromide (74-83-9)	☐	☐	☑	NA											
21V. Methyl Chloride (74-87-3)	☐	☐	☑	NA											

CONTINUE ON PAGE 4

*Outfall #008 has yet to be surveyed and developed. No sample has been taken for this location.

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER 008

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING RE-QUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC.MS FRACTION – VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)	☐	☐	☑	NA											
23V. 1,1,2,2 – Tetra-chloroethane (79-34-5)	☐	☐	☑	NA											
24V. Tetrachloroethylene (127-18-4)	☐	☐	☑	NA											
25V. Toluene (108-88-3)	☐	☐	☑	NA											
26V. 1,2 – Trans Dichloroethylene (156-60-5)	☐	☐	☑	NA											
27V. 1,1,1 – Tri – chloroethane (71-55-6)	☐	☐	☑	NA											
28V. 1,1,2 – Tri-chloroethane (79-00-5)	☐	☐	☑	NA											
29V. Trichloro – ethylene (79-01-6)	☐	☐	☑	NA											
30V. Trichloro – fluoromethane (75-69-4)	☐	☐	☑	NA											
31V. Vinyl Chloride (75-01-4)	☐	☐	☑	NA											
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2 – Chlorophenol (95-57-8)	☐	☐	☑	NA											
2A. 2,4 – Dichloro – phenol (120-83-2)	☐	☐	☑	NA											
3A. 2,4 – Dimethyl – phenol (105-67-9)	☐	☐	☑	NA											
4A. 4,6 – Dinitro - O-Cresol (534-52-1)	☐	☐	☑	NA											
5A. 2,4 – Dinitro – phenol (51-28-5)	☐	☐	☑	NA											
6A. 2-Nitrophenol (88-75-5)	☐	☐	☑	NA											
7A. 4-Nitrophenol (100-02-7)	☐	☐	☑	NA											
8A. P – Chloro – M Cresol (59-50-7)	☐	☐	☑	NA											
9A. Pentachloro – phenol (87-86-5)	☐	☐	☑	NA											
10A. Phenol (108-952)	☐	☐	☑	NA											
11A. 2,4,6 – Trichloro-phenol (88-06-2)	☐	☐	☑	NA											
12A. 2 - methyl – 4,6 dinitrophenol (534-52-1)	☐	☐	☑	NA											

CONTINUE ON PAGE 5

MO 780-1516 (06-13)

*Outfall #008 has yet to be surveyed and developed. No sample has been taken for this location.

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	☐	☐	☑	NA											
2B. Acenaphtylene (208-96-8)	☐	☐	☑	NA											
3B. Anthracene (120-12-7)	☐	☐	☑	NA											
4B. Benzidine (92-87-5)	☐	☐	☑	NA											
5B. Benzo (a) Anthracene (56-55-3)	☐	☐	☑	NA											
6B. Benzo (a) Pyrene (50-32-8)	☐	☐	☑	NA											
7B. 3,4 – Benzofluoranthene (205-99-2)	☐	☐	☑	NA											
8B. Benzo (ghi) Perylene (191-24-2)	☐	☐	☑	NA											
9B. Benzo (k) Fluoranthene (207-08-9)	☐	☐	☑	NA											
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	☐	☐	☑	NA											
11B. Bis (2-Chloroethyl) Ether (111-44-4)	☐	☐	☑	NA											
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)	☐	☐	☑	NA											
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	☐	☐	☑	NA											
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	☐	☐	☑	NA											
15B. Butyl Benzyl Phthalate (85-68-7)	☐	☐	☑	NA											
16B. 2-Chloronaphthalene (91-58-7)	☐	☐	☑	NA											
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	☐	☐	☑	NA											
18B. Chrysene (218-01-9)	☐	☐	☑	NA											
19B. Dibenzo (a.h) Anthracene (53-70-3)	☐	☐	☑	NA											
20B. 1,2 – Dichlorobenzene (95-50-1)	☐	☐	☑	NA											
21B. 1,3 – Dichlorobenzene (541-73-1)	☐	☐	☑	NA											

CONTINUE ON PAGE 6

*Outfall #008 has yet to be surveyed and developed. No sample has been taken for this location.

CONTINUED FROM PAGE 5

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	008

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (*continued*)															
22B. 1, 4-Dichlorobenzene (106-46-7)	☐	☐	☑	NA											
23B. 3, 3'-Dichlorobenzidine (91-94-1)	☐	☐	☑	NA											
24B. Diethyl Phthalate (84-66-2)	☐	☐	☑	NA											
25B. Dimethyl Phthalate (131-11-3)	☐	☐	☑	NA											
26B. Di-N-butyl Phthalate (84-74-2)	☐	☐	☑	NA											
27B. 2,4-Dinitrotoluene (121-14-2)	☐	☐	☑	NA											
28B. 2,6-Dinitrotoluene (606-20-2)	☐	☐	☑	NA											
29B. Di-N-Octyphthalate (117-84-0)	☐	☐	☑	NA											
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	☐	☐	☑	NA											
31B. Fluoranthene (206-44-0)	☐	☐	☑	NA											
32B. Fluorene (86-73-7)	☐	☐	☑	NA											
33B. Hexachlorobenzene (87-68-3)	☐	☐	☑	NA											
34B. Hexachlorobutadiene (87-68-3)	☐	☐	☑	NA											
35B. Hexachloro-cyclopentadiene (77-47-4)	☐	☐	☑	NA											
36B. Hexachloroethane (67-72-1)	☐	☐	☑	NA											
37B. Indeno (1,2,3-c-d) Pyrene (193-39-5)	☐	☐	☑	NA											
38B. Isophorone (78-59-1)	☐	☐	☑	NA											
39B. Naphthalene (91-20-3)	☐	☐	☑	NA											
40B. Nitrobenzene (98-95-3)	☐	☐	☑	NA											
41B. N-Nitro-sodimethylamine (62-75-9)	☐	☐	☑	NA											

CONTINUE ON PAGE 7

*Outfall #008 has yet to be surveyed and developed. No sample has been taken for this location.

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TES-ING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
42B. N-Nitroso N-Propylamine (621-64-7)	☐	☐	☑	NA											
43B. N-Nitro-sodiphenylamine (86-30-6)	☐	☐	☑	NA											
44B. Phenanthrene (85-01-8)	☐	☐	☑	NA											
45B. Pyrene (129-00-0)	☐	☐	☑	NA											
46B. 1,2,4-Tri chlorobenzene (120-82-1)	☐	☐	☑	NA											
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	☐	☐	☑	NA											
2P. α-BHC (319-84-6)	☐	☐	☑	NA											
3P. β-BHC (319-84-6)	☐	☐	☑	NA											
4P. γ-BHC (58-89-9)	☐	☐	☑	NA											
5P. δ-BHC (319-86-8)	☐	☐	☑	NA											
6P. Chlordane (57-74-9)	☐	☐	☑	NA											
7P. 4,4'-DDT (50-29-3)	☐	☐	☑	NA											
8P. 4,4'-DDE (72-55-9)	☐	☐	☑	NA											
9P. 4,4'-DDD (72-54-8)	☐	☐	☑	NA											
10P. Dieldrin (60-57-1)	☐	☐	☑	NA											
11P. α-Endosulfan (115-29-7)	☐	☐	☑	NA											
12P. β-Endosultan (115-29-7)	☐	☐	☑	NA											
13P. Endosulfan Sulfate (1031-07-8)	☐	☐	☑	NA											
14P. Endrin (72-20-8)	☐	☐	☑	NA											
15P. Endrin Aldehyde (7421-93-4)	☐	☐	☑	NA											
16P. Heptachlor (76-44-8)	☐	☐	☑	NA											

CONTINUED ON PAGE 8

*Outfall #008 has yet to be surveyed and developed. No sample has been taken for this location.

CONTINUED FROM PAGE 7

NPDES # (*IF ASSIGNED*)	OUTFALL NUMBER
	008

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (*if available*)		C. LONG TERM AVRG. VALUE (*if available*)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICISES *(continued)*															
17P. Heptachlor Epoxide (1024-57-3)	☐	☐	☑	NA											
18P. PCB-1242 (53469-21-9)	☐	☐	☑	NA											
19P. PBC-1254 (11097-69-1)	☐	☐	☑	NA											
20P. PCB-1221 (11104-28-2)	☐	☐	☑	NA											
21P. PCB-1232 (11141-16-5)	☐	☐	☑	NA											
22P. PCB-1248 (12672-29-6)	☐	☐	☑	NA											
23P. PCB-1260 (11096-82-5)	☐	☐	☑	NA											
24P. PCB-1016 (12674-11-2)	☐	☐	☑	NA											
25P. Toxaphene (8001-35-2)	☐	☐	☑	NA											
J. RADIOACTIVITY															
(1) Alpha Total	☐	☐	☑	NA											
(2) Beta Total	☐	☐	☑	NA											
(3) Radium Total	☐	☐	☑	NA											
(4) Radium 226 Total	☐	☐	☑	NA											

*Outfall #008 has yet to be surveyed and developed. No sample has been taken for this location.

Bridgeton Landfill Storm Water Sampling Results Summary 1Q 2011 to 3Q 2015								
Outfall #	Outfall #003		Outfall #004		Outfall #005		Outfall #007	
Parameter	Conc.	Units	Conc.	Units	Conc.	Units	Conc.	Units
pH	7.70	SIU	7.98	SIU	7.69	SIU	7.62	SIU
BOD	41.93	mg/L	6.03	mg/L	8.37	mg/L	54.74	mg/L
COD	97.08	mg/L	25.00	mg/L	36.27	mg/L	152.21	mg/L
TSS	50.50	mg/L	46.75	mg/L	177.67	mg/L	323.29	mg/L
Settable Solids	0.03	mg/L	0.13	mg/L	0.06	mg/L	0.28	mg/L
Oil & Grease	0.88	mg/L	0.00	mg/L	0.00	mg/L	1.16	mg/L
Ammonia as N	0.95	mg/L	0.08	mg/L	0.19	mg/L	0.18	mg/L
Chlorids + Sulfates	175.71	mg/L	58.28	mg/L	35.93	mg/L	104.84	mg/L
Hardness	194.23	mg/L	102.88	mg/L	14531.43	mg/L	11653.86	mg/L
Aluminum	62494.92	ug/L	583.00	ug/L	10718.67	ug/L	3941.06	ug/L
Antimony	0.00	ug/L	0.00	ug/L	0.00	ug/L	0.00	ug/L
Aresenic	5.87	ug/L	0.00	ug/L	3.83	ug/L	1.16	ug/L
Beryillium	0.00	ug/L	0.00	ug/L	0.19	ug/L	0.00	ug/L
Cadmium	0.00	ug/L	0.00	ug/L	0.04	ug/L	0.04	ug/L
Chromium III	0.85	ug/L	0.00	ug/L	9.22	ug/L	9.57	ug/L
Chromium VI	0.00	ug/L	0.00	ug/L	0.00	ug/L	0.36	ug/L
Cobalt	0.00	ug/L	0.00	ug/L	1.80	ug/L	1.28	ug/L
Copper	0.97	ug/L	0.53	ug/L	7.28	ug/L	25.27	ug/L
Iron	2690.92	ug/L	665.25	ug/L	10324.11	ug/L	8613.57	ug/L
Lead	0.83	ug/L	0.00	ug/L	5.47	ug/L	16.56	ug/L
Mercury	0.00	ug/L	0.00	ug/L	0.09	ug/L	0.74	ug/L
Nickel	2.08	ug/L	0.00	ug/L	11.17	ug/L	22.41	ug/L
Selenium	2.60	ug/L	0.00	ug/L	0.00	ug/L	1.57	ug/L
Silver	0.00	ug/L	0.00	ug/L	0.00	ug/L	0.00	ug/L
Thallium	0.00	ug/L	0.00	ug/L	0.00	ug/L	0.00	ug/L
Zinc	33.27	ug/L	16.30	ug/L	40.78	ug/L	102.24	ug/L
Benzene	3.69	ug/L	0.00	ug/L	1.02	ug/L	3.43	ug/L
Ethylbenzene	0.00	ug/L	0.00	ug/L	0.00	ug/L	0.00	ug/L
Sampling Events:	12		4		9		14	

EPA ID Number (*copy from Item 1 of Form 1*)

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

Please print or type in the unshaded areas only.

FORM 2F NPDES

EPA

U.S. Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (*list*)	B. Latitude			C. Longitude			D. Receiving Water (*name*)
003	38	45	46.18	90	27	00.17	Unnamed Tributary to Missouri River
004	38	46	16.49	90	27	14.01	Unnamed Tributary to Missouri River
005	38	45	53.59	90	27	13.99	Unnamed Tributary to Missouri River
007	38	45	43.67	90	26	37.15	Unnamed Tributary to Missouri River
*008	38	46	11.08	90	26	25.10	Unnamed Tributary to Missouri River
*Approx Location							

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs 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.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
Adding outfall location	008	Stormwater	Outfall created due to improvements on northern property		
Removing outfall location	006	Stormwater	Outfall removed due to stormwater discharges through to Outfall #004		

B: You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfalls(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage of disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility.

Continue on Page 2

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
003	34.17 acres	71.7 acres			
004	13.6 acres	72.5 acres			
005	14.51 acres	37.9 acres			
007	2 acres	46.6 acres			
008	<0.5 acres	1.42 acres			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by those materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

Closed Municipal Solid Waste & Demolition Landfill

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
003	Retention Basin	1-U
004	Retention Basin	1-U
005	Retention Basin	1-U
007	NA	
008	NA	

V. Nonstormwater Discharges

A. I certify under penalty of law hat the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or From 2E application for the outfall.

Name and Official Title (*type or print*)	Signature	Date Signed
Derek Bouchard, Environmental Specialist	Derek Bouchard	12/23/15

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Samples were taken at Outfall #004, #005, and #007 on July 20, 2015. The last time flow was observed and sampled for Outfall #003 was June 4, 2014. Outfall #008 has not yet been sampled.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

Two leachate spills occured at Bridgeton Landfill on 2/2/13 and 12/12/13 that released through outfall #003 (previously permitted location). The 2/2/13 release resulted in a leachate spill onto adjacent property to the southwest. The release on 12/12/13 did not result in leachate exiting the property owned by Bridgeton Landfill. The spill was contained within the south retention basin. Both leachate spills were properly remediated and in order to minimize future releases, gate valves have been installed to contain spills on the site.

 Continue on Page 3

Continued from Page 2

EPA ID Number *(copy from Item 1 of Form 1)*

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes (*list all such pollutants below*) ☑ No (*go to Section IX*)

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (*list all such pollutants below*) ☑ No (*go to Section IX*)

IX. Contract Analysis Information

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☑ Yes (*list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below*) ☐ No (*go to Section X*)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
PDC Laboratories, Inc.	3278 N. Highway 67 Florrisant, MO 63033	314-432-0550	Chloride, Sulfate, BOD, COD, Hexavalent Chromium, Oil & Grease, SS, TSS, Ammonia-N, Trivalent Chromium, Aluminum, Mercury, Antimony, Arsenic, Beryllium, Hardness, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Nickel, Selenium, Silver, Thallium, Zinc, Benzene, Ethylbenzene

X. 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.

A. Name & Official Title (*Type Or Print*)	B. Area Code and Phone No.
Derek Bouchard, Environmental Specialist	(314)744-8165
C. Signature: Derek Bouchard	D. Date Signed: 12/23/15

EPA ID Number (*copy from Item 1 of Form 1*)

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

VII. Discharge Information *(Continued from page 3 of Form 2F)* Outfall #003

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

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	<4.7 mg/L	N/A	<4.7 mg/L	N/A	1	
Biological Oxygen Demand (BOD5)	8.9 mg/L	125.8 lbs	8.9 mg/L	125 lbs	1	
Chemical Oxygen Demand (COD)	15 mg/L	211.9 lbs	15 mg/L	211.9 lbs	1	
Total Suspended Solids (TSS)	120 mg/L	1696 lbs	120 mg/L	1696 lbs	1	
Total Nitrogen	N/A		N/A		0	
Total Phosphorus	N/A		N/A		0	
pH	Minimum 7.74	Maximum 7.74	Minimum 7.74	Maximum 7.74	1	

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Ammonia as N	0.41 mg/L	5.79 lbs	0.41 mg/L	5.79 lbs	1	
Total Hardness	260 mg/L	3674 lbs	260 mg/L	3674 lbs	1	
Aluminum	2.6 mg/L	36.74 lbs	2.6 mg/L	36.74 lbs	1	
Antimony	<0.01 mg/L		<0.01 mg/L		1	
Arsenic	<0.015 mg/L		<0.015 mg/L		1	
Beryllium	<0.001 mg/L		<0.001 mg/L		1	
Cadmium	<0.002 mg/L		<0.002 mg/L		1	
Chromium (III)	<0.005 mg/L		<0.005 mg/L		1	
Chromium (IV)	<0.005 mg/L		<0.005 mg/L		1	
Cobalt	<0.002 mg/L		<0.002 mg/L		1	
Copper	0.0032 mg/L	0.045 lbs	0.0032 mg/L	0.045 lbs	1	
Iron	3.4 mg/L	48.0 lbs	3.4 mg/L	48.0 lbs	1	
Lead	<0.01 mg/L		<0.01 mg/L		1	
Mercury	<0.0002 mg/L		<0.0002mg/L		1	
Nickel	0.006 mg/L	0.085 lbs	0.006 mg/L	0.085 lbs	1	
Silver	<0.002 mg/L		<0.002 mg/L		1	
Thallium	<0.02 mg/L		<0.02 mg/L		1	
Zinc	0.027 mg/L	0.382 lbs	0.027 mg/L	0.382 lbs	1	
Benzene	<5.0 ug/L		<5.0 ug/L		1	
Ethylbenzene	<5.0 ug/L		<5.0 ug/L		1	
Chlorides +					1	
Sulfates	189 mg/L	2670 lbs	189 mg/L	2670 lbs	1	

Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*
June 4, 2014	1440 (1 day)	0.87			1,693,000 gallons

7. Provide a description of the method of flow measurement or estimate.

Storm event at which the sample for this outfall was taken (June 4, 2014) was used for calculation. 71.7 acres was assumed for drainage area, and for simplicity of the calculation and taking a conservative approach, the drainage area was assumed 100% impervious.

EPA ID Number (*copy from Item 1 of Form 1*)

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

VII. Discharge information *(Continued from page 3 of Form 2F)* Outfall #004

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

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	<5 mg/L	N/A	<5 mg/L	N/A	1	
Biological Oxygen Demand (BOD5)	<5 mg/L		<5 mg/L		1	
Chemical Oxygen Demand (COD)	<50 mg/L		<50 mg/L		1	
Total Suspended Solids (TSS)	<6 mg/L		<6 mg/L		1	
Total Nitrogen	N/A		N/A		0	
Total Phosphorus	N/A		N/A		0	
pH	Minimum 7.92	Maximum 7.92	Minimum 7.92	Maximum 7.92	1	

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Ammonia as N	<0.10 mg/L		<0.10 mg/L		1	
Total Hardness	86.5 mg/L	933.5 lbs	86.5 mg/L	933.5 lbs	1	
Aluminum	0.149 mg/L	1.61 lbs	0.149 mg/L	1.61 lbs	1	
Antimony	<0.05 mg/L		<0.05 mg/L		1	
Arsenic	<0.025 mg/L		<0.025 mg/L		1	
Beryllium	<0.0005 mg/L		<0.0005mg/L		1	
Cadmium	<0.002 mg/L		<0.002 mg/L		1	
Chromium (III)	<0.001 mg/L		<0.001 mg/L		1	
Chromium (IV)	<0.005 mg/L		<0.005 mg/L		1	
Cobalt	<0.005 mg/L		<0.005 mg/L		1	
Copper	<0.005 mg/L		<0.005 mg/L		1	
Iron	0.163 mg/L	1.76 lbs	0.163 mg/L	1.76 lbs	1	
Lead	<0.015 mg/L		<0.015 mg/L		1	
Mercury	<0.0002 mg/L		<0.0002mg/L		1	
Nickel	<0.005 mg/L		<0.005 mg/L		1	
Silver	<0.005 mg/L		<0.005 mg/L		1	
Thallium	<0.02 mg/L		<0.02 mg/L		1	
Zinc	0.027 mg/L	0.291 lbs	0.027 mg/L	0.291 lbs	1	
Benzene	<2.0 ug/L		<2.0 ug/L		1	
Ethylbenzene	<5.0 ug/L		<5.0 ug/L		1	
Chlorides +					1	
Sulfates	46 mg/L	496.4 lbs	46 mg/L	496.4 lbs	1	

Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*
July 20, 2015	1440 (1 day)	0.56			1,293,000 gallons

7. Provide a description of the method of flow measurement or estimate.

Storm event at which the sample for this outfall was taken (July 20, 2015) was used for calculation. 72.5 acres was assumed for drainage area. For simplicity of the calculation and taking a conservative approach, the drainage area was assumed 100% impervious.

EPA ID Number (*copy from Item 1 of Form 1*)

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

VII. Discharge information *(Continued from page 3 of Form 2F)* Outfall #005

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

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	<5 mg/L	N/A	<5 mg/L	N/A	1	
Biological Oxygen Demand (BOD5)	<5 mg/L		<5 mg/L		1	
Chemical Oxygen Demand (COD)	36 mg/L	173.1 lbs	36 mg/L	173.1 lbs	1	
Total Suspended Solids (TSS)	285 mg/L	1370 lbs	285 mg/L	1370 lbs	1	
Total Nitrogen	N/A		N/A		0	
Total Phosphorus	N/A		N/A		0	
pH	Minimum 8.07	Maximum 8.07	Minimum 8.07	Maximum 8.07	1	

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Ammonia as N	0.14 mg/L	0.673 lbs	0.14 mg/L	0.673 lbs	1	
Total Hardness	96.1 mg/L	462 lbs	96.1 mg/L	462 lbs	1	
Aluminum	30.2 mg/L	145.2 lbs	30.2 mg/L	145.2 lbs	1	
Antimony	<0.05 mg/L		<0.05 mg/L		1	
Arsenic	0.01 mg/L	0.048 lbs	0.01 mg/L	0.048 lbs	1	
Beryllium	0.0013 mg/L	0.006 lbs	0.0013 mg/L	0.006 lbs	1	
Cadmium	0.0004 mg/L	0.002 lbs	0.0004 mg/L	0.002 lbs	1	
Chromium (III)	0.028 mg/L	0.135 lbs	0.028 mg/L	0.135 lbs	1	
Chromium (IV)	<0.25 mg/L		<0.25 mg/L		1	
Cobalt	0.0079 mg/L	0.038 lbs	0.0079 mg/L	0.038 lbs	1	
Copper	0.0203 mg/L	0.098 lbs	0.0203 mg/L	0.098 lbs	1	
Iron	29.1 mg/L	139.9 lbs	29.1 mg/L	139.9 lbs	1	
Lead	0.0156 mg/L	0.075 lbs	0.0156 mg/L	0.075 lbs	1	
Mercury	<0.0002 mg/L		<0.0002mg/L		1	
Nickel	0.0269 mg/L	0.13 lbs	0.0269 mg/L	0.13 lbs	1	
Silver	<0.005 mg/L		<0.005 mg/L		1	
Thallium	<0.05 mg/L		<0.05 mg/L		1	
Zinc	0.0744 mg/L	0.358 lbs	0.0744 mg/L	0.358 lbs	1	
Benzene	0.9 ug/L	0.004 lbs	0.9 ug/L	0.004 lbs	1	
Ethylbenzene	<5.0 ug/L		<5.0 ug/L		1	
Chlorides +					1	
Sulfates	26 mg/L	125 lbs	26 mg/L	125 lbs	1	

Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*
July 20, 2015	1440 (1 day)	0.56			576,000 gallons

7. Provide a description of the method of flow measurement or estimate.

Storm event at which the sample for this outfall was taken (July 20, 2015) was used for calculation. 37.9 acres was assumed for drainage area. For simplicity of the calculation and taking a conservative approach, the drainage area was assumed 100% impervious.

EPA ID Number (*copy from Item 1 of Form 1*)

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VII. Discharge information *(Continued from page 3 of Form 2F)* Outfall #007

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

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	8 mg/L	N/A	8 mg/L	47.34 lbs	1	
Biological Oxygen Demand (BOD5)	60 mg/L	355 lbs	60 mg/L	355 lbs	1	
Chemical Oxygen Demand (COD)	189 mg/L	1118 lbs	189 mg/L	1118 lbs	1	
Total Suspended Solids (TSS)	86 mg/L	509 lbs	86 mg/L	509 lbs	1	
Total Nitrogen	N/A		N/A		0	
Total Phosphorus	N/A		N/A		0	
pH	Minimum 7.4	Maximum 7.4	Minimum 7.4	Maximum 7.4	1	

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Ammonia as N	0.07 mg/L	0.414 lbs	0.07 mg/L	0.414 lbs	1	
Total Hardness	263 mg/L	1556 lbs	263 mg/L	1556 lbs	1	
Aluminum	2.8 mg/L	16.57 lbs	2.8 mg/L	16.57 lbs	1	
Antimony	<0.05 mg/L		<0.05 mg/L		1	
Arsenic	<0.025 mg/L		<0.025 mg/L		1	
Beryllium	<0.0005 mg/L		<0.0005mg/L		1	
Cadmium	0.0005 mg/L	0.003 lbs	0.0005 mg/L	0.003 lbs	1	
Chromium (III)	0.028 mg/L	0.166 lbs	0.028 mg/L	0.166 lbs	1	
Chromium (IV)	<0.025 mg/L		<0.025 mg/L		1	
Cobalt	0.0033 mg/L	0.02 lbs	0.0033 mg/L	0.02 lbs	1	
Copper	0.0219 mg/L	0.13 lbs	0.0219 mg/L	0.13 lbs	1	
Iron	3.56 mg/L	21.07 lbs	3.56 mg/L	21.07 lbs	1	
Lead	0.012 mg/L	0.071 lbs	0.012 mg/L	0.071 lbs	1	
Mercury	0.000272 mg/L		0.00027mg/L		1	
Nickel	0.0114 mg/L	0.067 lbs	0.0114 mg/L	0.067 lbs	1	
Silver	<0.005 mg/L		<0.005 mg/L		1	
Thallium	<0.05 mg/L		<0.05 mg/L		1	
Zinc	0.079 mg/L	0.467 lbs	0.079 mg/L	0.467 lbs	1	
Benzene	<2.0 ug/L		<2.0 ug/L		1	
Ethylbenzene	<5.0 ug/L		<5.0 ug/L		1	
Chlorides +					1	
Sulfates	133 mg/L	787 lbs	133 mg/L	787 lbs	1	

Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*
July 20, 2015	1440 (1 day)	0.56			709,000 gallons

7. Provide a description of the method of flow measurement or estimate.

Storm event at which the sample for this outfall was taken (July 20, 2015) was used for calculation. 46.6 acres was assumed for drainage area. For simplicity of the calculation and taking a conservative approach, the drainage area was assumed 100% impervious.

EPA ID Number (*copy from Item 1 of Form 1*)

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

VII. Discharge information *(Continued from page 3 of Form 2F)* Outfall #008

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

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease		N/A				
Biological Oxygen Demand (BOD5)						
Chemical Oxygen Demand (COD)						
Total Suspended Solids (TSS)						
Total Nitrogen						
Total Phosphorus						
pH	Minimum	Maximum	Minimum	Maximum		

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		

Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*

7. Provide a description of the method of flow measurement or estimate.

This proposed outfall location has yet to be surveyed and developed. A sample has not yet been collected.