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-0101117
Owner:	Evergy, Inc.
Address:	P.O. Box 418679, Kansas City, MO 64141-9679
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Montrose Generating Station
Facility Address:	400 SW Highway P, Clinton, MO 64735
Legal Description:	See following page(s); Henry County
UTM Coordinates:	See following page(s)
Receiving Stream:	Montrose Lake
First Classified Stream and ID:	Montrose Lake (L3) WBID# 7208
USGS Basin & Sub-watershed No.:	Camp Creek – Deepwater Creek 10290108-0603

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

FACILITY DESCRIPTION

Former power generating facility; coal pile runoff, coal combustion residual (CCR) landfill stormwater, CCR landfill contact stormwater, CCR landfill leachate, land disturbance activities (stormwater), and industrially exposed stormwater. SIC #4911; NAICS #221112; see following pages for additional descriptions.

This permit authorizes only wastewater and 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.

June 1, 2019 Effective Date December 1, 2019 Modification Date

Edward B. Galbraith, Director, Division of Environmental Quality

Chris Wieberg, Director, Water Projection Program

May 31, 2024 Expiration Date

FACILITY DESCRIPTION (CONTINUED)

PERMITTED FEATURE #001 – domestic wast	ewater storage lagoon; wastewater is irrigated; sludge retained in lagoon and land applied;
wastewater hauled to permitted POTW whe	in lagoon is full during saturated conditions; stabilization ponds
Legal Description:	Sec.31, 141N, KZ/W , Henry County N = 417052, N = 4240072
UTM Coordinates:	X = 41/952, Y = 42409/2
Design Population Equivalent:	$\frac{103}{720} = \frac{1}{10} = \frac{1}{1$
Design Flow:	(1,206 gallons per day (1-1) user design including net rainfall minus evap.)
Average Design Flow:	4,180 gallons per day (dry weather flows)
Design Sludge Production:	2.45 dry tons per year
Sludge Storage:	51,200 cubic feet; 105 days
<u>OUTFALL #003</u> – CCR landfill leachate, leg (formerly south ash pond); sedimentation, r	acy ash transport water, landfill stormwater runoff, land disturbance stormwater runoff; neutralization
Legal Description:	Sec.32, T41N, R27W, Henry County
UTM Coordinates:	X = 417910, Y = 4240652
Average Flow:	0.0653 MGD
Design Flow:	2.9 MGD
OUTFALL #004 – CCR landfill leachate, leg	acy ash transport water. landfill stormwater runoff, land disturbance stormwater runoff:
(formerly north ash pond): sedimentation n	eutralization
Legal Description:	Sec 32 T41N R27W Henry County
Legal Description.	V = 417841 V = 4240705
A verge Eleve	A = 417641, 1 = 4240775
Average Flow:	0.0055 MOD
Design Flow:	2.9 MGD
<u>OUTFALL #005</u> – stormwater runoff from pl neutralization	ant decommissioning activities and land disturbance activities; sedimentation,
Legal Description:	Sec.31, T41N, R27W, Henry County
UTM Coordinates:	X = 417913, Y = 4240649
Stormwater Max Flow:	0.0627 MGD
<u>OUTFALL #006</u> – stormwater runoff from pl neutralization	ant decommissioning activities and land disturbance activities; oil water separator,
Legal Description:	Sec 31 T41N R27W Henry County
UTM Coordinates:	X = 418131 V = 4240638
Stormwater Max Flow:	0 502 MCD
Stoffiwater Max Plow.	0.372 MOD
OUTFALL #007 - coal pile runoff; land distu	arbance activities stormwater runoff; sedimentation, neutralization
Legal Description:	Sec.31, T41N, R27W, Henry County
UTM Coordinates:	X = 418785 Y = 4240933
Stormwater Max Flow:	2.127 MGD
<u>OUTFALL #008</u> – CCR landfill leachate, lan leachate collection system	dfill stormwater runoff, land disturbance stormwater runoff; sedimentation, neutralization,
Legal Description:	Sec.31, T41N, R27W, Henry County
UTM Coordinates:	X = 417244 $Y = 4240591$
Design Flow:	2 07 MGD
Average Flow:	0.0465 MGD
<u>OUTFALL #009</u> – stormwater runoff from pl	ant decommissioning activities and land disturbance activities; oil water separator,
Legal Description:	Sec. 51, 141N, KZ/W , Henry County
UTM Coordinates:	X = 418349, Y = 4240534
Stormwater Max Flow:	0.436 MGD
<u>OUTFALL #010</u> – stormwater runoff from pl	ant decommissioning activities and land disturbance activities; neutralization Sec 31 T41N R27W Henry County
UTM Coordinates:	X = 416812 V = 4240173
Stormwater Max Flow	0 521 MGD
Stormwater max 1 low.	

FACILITY DESCRIPTION (CONTINUED)

PERMITTED FEATURE #011 – land application field – 6 center pivot heads

Design Basis:	<u>Avg. Annual</u>
Design Dry Weather Flows	4,180 gallons/day
Design With 1-In-10 Year Flows	7,206 gallons/day
Design PE:	163
Storage Basin:	
Basin Freeboard:	1 foot minimum
Maximum Volume:	Cell #1: 525,970 gallons
	Cell #2: 159,410 gallons
	Cell #3: 179,340 gallons
Storage Capacity:	Avg. Annual
Design for Dry weather Flows:	207 days
Design with 1-in-10 year flows:	120 days
Land Application:	
Design Irrigation Volume/year	2 630 000 gallons (including 1-in-1

Land Application: Design Irrigation Volume/year: Irrigation Areas: Application Rates/Acre: Field Slopes: Equipment Type: Vegetation: Application Rate Is Based On:

2,630,000 gallons (including 1-in-10 year flows) 2.8 acres at design loading (2.8 acres total available) 0.04 inch/hour; 0.3 inch/day; 2.1 inches/week; 34.6 inches/year < 4 % Sprinkler Pasture Hydraulic Loading

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMITTED FEATURE #001 lagoon emergency discharge	TABLE A-1 Emergency Discharge Monitoring Requirements						
The permittee is authorized to emergence	y discharge with the fo	ollowing requir	ements:				
		FINAL EI	FFLUENT LIM	ITATIONS	MONITORING REC	QUIREMENTS	
EFFLUENT PARAMETERS	Units	DAILY MAXIMUM	WEEKLY AVERAGE	Monthly Average	Measurement Frequency	Sample Type	
LIMIT SET: ED		-					
EMERGENCY DISCHARGE							
Flow	MGD	*		*	daily **	24 hr. total	
Ammonia, Total as N	mg/L	*		*	daily * *	grab	
Biochemical Oxygen Demand5	mg/L	*		*	daily **	grab	
E. coli	#/100mL	*		*	daily * *	grab	
pH	SU	*		*	daily 👬	grab	
Total Suspended Solids	mg/L	*		*	daily * *	grab	
MONITORING REPORTS SHALL BE SUBMITTED BY THE 28 th Day OF THE MONTH FOLLOWING DISCHARGE.							
PERMITTED FEATURE #011 TABLE A-2 domestic wastewater land application FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS							
The permittee is authorized to land apply	in accordance with th	ne following co	nditions:				
		FINAL EFFLUENT LIMITATIONS			MONITORING REC	QUIREMENTS	
EFFLUENT PARAMETERS	Units	DAILY MAXIMUM	WEEKLY AVERAGE	Monthly Average	Measurement Frequency	SAMPLE Type	
LIMIT SET: M		•	•				
Physical							
Freeboard	feet	*			once/month	24 hr. total	
IRRIGATION							
Irrigation Period	hours	*			daily	total	
Irrigation Volume, Monthly Total	gallons	*			daily	total	
Application Area	acres	*			daily	total	
Application Rate	inches/acre	*			daily	total	
MONITORING REPOR THERE SHALL BE NO DISC	IS SHALL BE SUBMI CHARGE OF FLOATIN	TTED <u>Month</u> ng Solids Or	<u>ly;</u> The Firs [®] Visible Fo <i>a</i>	T REPORT IS E M IN OTHER	DUE <u>JULY 28, 2019</u> . Than Trace Amoun	NTS.	
LIMIT SET: A							
Iron, Total Recoverable ‡	mg/L	*			once/year	grab	
Kjeldahl Nitrogen as N (TKN) ‡	mg/L	*			once/year	grab	
Magnesium, Total Recoverable ‡	mg/L	*			once/year	grab	
Phosphorus, Total (TP) ‡	mg/L	*			once/year	grab	
MONITORING REPORTS THERE SHALL BE NO DISC	SHALL BE SUBMITT CHARGE OF FLOATIN	ed <u>Annuall</u> ng Solids Or	<u>y;</u> The First Visible Fo <i>a</i>	REPORT IS DU M IN OTHER	ue <u>January 28, 202</u> 0 Than Trace Amour	<u>0</u> . NTS.	

* Monitoring and reporting requirement only

: If land application does not occur during the report period, report as "no discharge".

‡ Process wastewater which is land applied shall be sampled at the irrigation pump, wet well, or application vehicle.

** The facility shall sample daily each day a discharge occurs; no report is needed if there is no discharge.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

OUTFALLS #003, #004, & #008 CCR landfill leachate

TABLE A-3 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 **June 1**, **2019** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:

	T Is your o	FINAL E	FFLUENT LIMI	MONITORING REQUIREMENTS		
EFFLUENT PARAMETERS	UNITS	DAILY	WEEKLY	MONTHLY	MEASUREMENT	SAMPLE
		MAXIMUM	AVERAGE	AVERAGE	FREQUENCY	Түре
LIMIT SET: M				•		
PHYSICAL						
Flow	MGD	*		*	once/month	24 hr. total
CONVENTIONAL						
Oil & Grease	mg/L	15		10	once/month	grab
pH †	SU	6.5 to 9.0		6.5 to 9.0	once/month	grab
Total Suspended Solids (outfalls #003 & #004)	mg/L	100		30	once/month	grab
Total Suspended Solids (outfall #008)	mg/L	50		30	once/month	grab
METALS						
Boron, Total Recoverable	μg/L	*		*	once/month	grab
Molybdenum, Total Recoverable	μg/L	*		*	once/month	grab
MONITORING REPORTS SHALL BE	SUBMITT	ED <u>Monthly</u>	; THE FIRST R	EPORT IS DUE	E <u>JULY 28, 2019</u> .	
THERE SHALL BE NO DISCHARGE OF I	FLOATING	SOLIDS OR V	ISIBLE FOAM	IN OTHER TH	AN TRACE AMOUN	NTS.
LIMIT SET: Q				1		1
METALS						
Arsenic	μg/L	*		*	once/quarter ◊	grab
Mercury, Total Recoverable	μg/L	*		*	once/quarter \diamond	grab
OTHER						
Chloride	mg/L	*		*	once/quarter ◊	grab
Sulfate	mg/L	*		*	once/quarter ◊	grab
Chloride plus Sulfate	mg/L	*		*	once/quarter ◊	grab
MONITORING REPORTS SHALL BE SU	BMITTED <u>(</u>)uarterly; [THE FIRST RE	PORT IS DUE (DCTOBER 28, 20	<u>19</u> .
THERE SHALL BE NO DISCHARGE OF I	FLOATING	SOLIDS OR V	ISIBLE FOAM	IN OTHER TH	AN TRACE AMOUN	NTS.

* Monitoring and reporting requirement only

- ** Monitoring and reporting requirement with benchmark. See Special Conditions for additional requirements.
- [†] pH: the facility will report the minimum and maximum values; pH is not to be averaged.

♦ Quarterly sampling

	MINIMUM QUARTERLY SAMPLING REQUIREMENTS							
QUARTER	QUARTER MONTHS QUARTERLY EFFLUENT PARAMETERS							
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					

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

OUTFALLS #005, #006, #009, & #010 Stormwater Only TABLE A-4 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 **June 1**, **2019** 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 Li	MITATIONS	BENCH- MARKS	MONITORING REQUIREMENTS		
		DAILY MAXIMUM	Monthly Average		Measurement Frequency	Sample Type	
LIMIT SET: Q							
PHYSICAL							
Flow	MGD	*		-	once/quarter ◊	24 Hr Est.	
CONVENTIONAL							
Chemical Oxygen Demand	mg/L	**		120	once/quarter \diamond	grab	
Oil & Grease	mg/L	**		10	once/quarter ◊	grab	
pH [†]	SU	6.5 to 9.0		-	once/quarter ◊	grab	
Total Suspended Solids	mg/L	**		100	once/quarter ◊	grab	
METALS							
Aluminum, Total Recoverable	μg/L	*		-	once/quarter \diamond	grab	
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2019</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.							

OUTFALL #007 coal pile runoff	TABLE A-5 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 June 1, 2019 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:								
FINAL EFFLUENT LIMITATIONS MONITORING REQUIREMENTS								
EFFLUENT PARAMETERS		UNITS	Daily Maximum	Weekly Average	Monthly Average	Measurement Frequency	Sample Type	
LIMIT SET: M	LIMIT SET: M							
PHYSICAL								
Flow		MGD	*		*	once/month	24 hr. total	
CONVENTIONAL								
Oil & Grease		mg/L	15		10	once/month	grab	
pH [†]		SU	6.5 to 9.0		6.5 to 9.0	once/month	grab	
Total Suspended Solids		mg/L	50		50	once/month	grab	
OTHER								
Chloride		mg/L	*		*	once/month	grab	
Sulfate		mg/L	*		*	once/month	grab	
Chloride plus Sulfate	Chloride plus Sulfate mg/L * once/month grab							
Monitoring There Shall Be	G REPORTS SHA NO DISCHARG	ll Be Submi e Of Floatin	fted <u>Month</u> ig Solids Or	<u>ly;</u> The Firs [.] Visible Fo <i>a</i>	T REPORT IS E M IN OTHER	DUE <u>JULY 28, 2019</u> . Than Trace Amour	NTS.	

* Monitoring and reporting requirement only

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

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

B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached <u>Part I and Part III</u> standard conditions dated <u>August 1, 2014 and March 1, 2015</u>, respectively, and hereby incorporated as though fully set forth herein.

C. SPECIAL CONDITIONS

- 1. There shall be no release of polychlorinated biphenyl compounds (PCBs) to waters of the state at or above the level of quantification currently defined as 1 ug/L or 1 ppb.
- 2. The facility shall manage the utility waste landfill settling pond associated with outfall #008 to ensure enough capacity is maintained to capture run-off from a 25-year 24-hour storm event.
- 3. Use or disposal of ash from power plants:
 - (a) Disposal of ash is not authorized by this permit.
 - (b) This permit does not pertain to permits for disposal of ash or exemptions for beneficial uses of ash under the Missouri Solid Waste Management Law and regulations.
 - (c) This permit does not authorize off-site storage, use, or disposal of ash in regard to water pollution control permits required under 10 CSR 20-6.015 and 10 CSR 20-6.200.
- 4. The facility shall include, in the application for permit renewal, all groundwater monitoring data obtained from January 1, 2018 to the time of application for permit renewal (180 days prior to permit expiration) for all monitoring wells established at the site. This data may be provided electronically.
- 5. Electronic Discharge Monitoring Report (eDMR) Submission System
 - (a) Discharge Monitoring Reporting Requirements. The permittee must electronically submit compliance monitoring data via the eDMR system. Standard Conditions Part I, Section B, #7 indicates the eDMR system is currently the only Department approved reporting method for this permit.
 - (b) Programmatic Reporting Requirements. The following reports (if required by this permit) must be electronically submitted as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the data:
 - (1) Schedule of Compliance Progress Reports;
 - (2) Wastewater Irrigation Annual Reports;
 - (3) Sludge/Biosolids Annual Reports;
 - (4) Any additional report required by the permit excluding bypass reporting.

After such a system has been made available by the Department, required data shall be directly input into the system by the next report due date.

- (c) Other actions. The following shall be submitted electronically after such a system has been made available by the Department:
 - (1) General Permit Applications/Notices of Intent to discharge (NOIs);
 - (2) Notices of Termination (NOTs);
 - (3) No Exposure Certifications (NOEs);
 - (4) Low Erosivity Waivers and Other Waivers from Stormwater Controls (LEWs); and
 - (5) Bypass reporting.
- (d) Electronic Submission: access the eDMR system, via: <u>https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx</u>.
- (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: <u>http://dnr.mo.gov/forms/780-2692-f.pdf</u>. 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.

C. SPECIAL CONDITIONS (CONTINUED)

6. 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 the 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 the 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 recording the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. CARs must be retained with the SWPPP and be available to the Department upon request. 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.

- 7. Permittee shall adhere to the following minimum Best Management Practices (BMPs) applicable to all outfalls:
 - (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, warehouse activities, and other areas 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. Spill records should be retained on-site.
 - (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.
 - (f) Ensure adequate provisions are provided to prevent surface water intrusion into the storage basin, to divert stormwater runoff around the storage basin, and to protect embankments from erosion.
- 8. To protect the general criteria found at 10 CSR 20-7.031(4), before releasing water accumulated in secondary containment areas, it must be examined for hydrocarbon odor and presence of sheen. If odor or sheen is indicated, the water shall be treated using an appropriate method prior to release; or disposed of in accordance with legally approved methods, such as being sent to a wastewater treatment facility. Following treatment but prior to release, 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 Tables A1-B3. Records of all testing and treatment of water accumulated in secondary containment shall be stored in the SWPPP to be available on demand to Department personnel.
- 9. This site operates oil water separators for the treatment of stormwater. OWS serving outfall #006 and #009 are hereby authorized and shall be operated per manufacturer's specifications. The manufacturer's specifications and operating records must be made accessible to Department staff upon request.
- 10. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Clean Water Act Sections 301(b)(2)(C) and (D), §304(b)(2), and §307(a) (2), if the effluent standard or limitation so issued or approved contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or controls any pollutant not limited in the permit. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, termination, notice of planned changes, or anticipated non-compliance does not stay any permit condition.
- 11. All outfalls and permitted features must be clearly marked in the field.

C. SPECIAL CONDITIONS (CONTINUED)

12. 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) That 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 μ g/L);
 - (2) Two hundred micrograms per liter (200 μ g/L) for acrolein and acrylonitrile;
 - (3) Five hundred micrograms per liter (500 μ g/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) That 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 μ g/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).
- 13. Report as no-discharge when a discharge does not occur during the report period. It is a violation of this permit to report nodischarge when a discharge has occurred.
- 14. 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 or the reporting limit of the laboratory. Reporting as "non-detect" without also including the detection/reporting 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 "<" symbol and the laboratory's detection/reporting limit (e.g. <6).
 - (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, then zero (0) is 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).
- 15. Failure to pay fees associated with this permit is a violation of the Missouri Clean Water Law (644.055 RSMo).

D. LAND DISTURBANCE CONDITIONS

1. This permit requires the development and implementation of a Stormwater Pollution Prevention Plan, or SWPPP, which incorporates site specific practices to best minimize soil exposure, soil erosion, and the discharge of pollutants. The permittee shall fully implement the provisions of the SWPPP required under this part as a condition of this permit throughout the term of the land disturbance project. The SWPPP must be developed upon permit issuance for industrial stormwater and revised prior to land disturbance activities begin and whenever significant changes occur. Either an electronic copy or a paper copy of the SWPPP must be accessible to anyone on-site at all times when land disturbance operations are in progress, or other operational activities that may affect the maintenance or integrity of the BMP structures and made available made available to the Department upon request. The purpose of the SWPPP is to ensure the design, implementation, management, and maintenance of BMPs in order to prevent pollutants in stormwater discharges entering waters of the state.

D. LAND DISTURBANCE CONDITIONS (CONTINUED)

- 2. This condition #2 is applicable to all stormwater at the site, including stormwater identified as industrially exposed and stormwater from land disturbance activities. The facility's description is found in 40 CFR 122.26(b)(14) and 10 CSR 20-6.200(2) hence shall implement a Stormwater Pollution Prevention Plan (SWPPP) which must be prepared and implemented upon permit effective date. The SWPPP must be kept on-site and should not be sent to the Department unless specifically requested. The SWPPP must be reviewed and updated every five years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf The purpose of the SWPPP and the Best Management Practices (BMPs) listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective preventing pollution [10 CSR 20-2.010(56)] of waters of the state. Corrective action means the facility took steps to eliminate the deficiency. The SWPPP must include:
 - 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 contain a legible site map showing the site boundaries and outfalls, and identifying:
 - (1) Direction(s) of stormwater flow and approximate slopes anticipated after grading activities;
 - (2) Areas of soil disturbance and areas that will not be disturbed (or a statement that all areas of the site will be disturbed unless otherwise noted);
 - (3) Location of major structural and non-structural BMPs identified in the SWPPP;
 - (4) Locations where stabilization practices are expected to occur;
 - (5) Locations of off-site material, waste, borrow or equipment storage areas;
 - (6) Locations of all waters of the state (including wetlands);
 - (7) Locations where stormwater discharges to a surface water; and
 - (8) Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.
 - (c) A schedule for at least 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 proposed 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. Electronic versions of the documents are acceptable.
 - (d) The SWPPP shall include a description of both structural and non-structural BMPs that will be used at the site.
 - The SWPPP shall provide the following general information for each BMP being used one or more times at the site:
 Physical description of the BMP;
 - ii. Site conditions that must be met for effective use of the BMP;
 - iii. BMP installation/construction procedures, including typical drawings; and
 - iv. Operation and maintenance procedures for the BMP.
 - (2) The SWPPP shall provide the following information for each specific instance where a BMP is to be installed:
 - i. Whether the BMP is temporary or permanent;
 - ii. Where, in relation to other site features, the BMP is to be located;
 - iii. When the BMP will be installed in relation to each phase of the land disturbance procedures to complete the project; and
 - iv. Site conditions that must be met before removal of the BMP if the BMP is not a permanent BMP.
 - (e) Slopes for disturbed areas must be defined in the SWPPP. A site map or maps defining the sloped areas for all phases of the project must be included in the SWPPP.
 - (1) For soil disturbing activities that have been temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days:
 - i. The permittee shall construct BMPs to establish interim stabilization; and
 - ii. Stabilization must be initiated immediately and completed within 14 calendar days.
 - (2) For soil disturbing activities that have been permanently ceased on any portion of the site, final stabilization of disturbed areas must be initiated immediately and completed within 14 calendar days.

D. LAND DISTURBANCE CONDITIONS (CONTINUED)

- (3) Allowances to the 14 day completion period for temporary and final stabilization may be made due to weather and equipment malfunctions. The use of allowances shall be documented in the SWPPP.
- (4) Interim stabilization shall consist of well-established and maintained BMPs that are reasonably certain to protect waters of the state from sediment pollution over an extended period of time. This may require adding more BMPs to an area than is normally used during daily operations. These BMPs may include a combination of sediment basins, check dams, sediment fences and mulch. The types of BMPs used must be suited to the area disturbed, taking into account the number of acres exposed and the steepness of the slopes. If the slope of the area is greater than 3:1 (three feet horizontal to one foot vertical) or if the slope is greater than 3% and greater than 150 feet in length, then the permittee shall establish interim stabilization within seven days of ceasing operations on that part of the site.
- (5) If vegetative stabilization measures are being implemented, stabilization is considered "installed" when all activities necessary to seed or plant the area are completed.
- (f) A provision for designating an individual to be responsible for environmental matters.
- (g) A provision for providing training to all personnel involved in housekeeping, material handling (including but not limited to loading and unloading), storage, and staging of all operational, maintenance, storage, and cleaning areas. Proof of training shall be submitted upon request by the Department.
- (h) The permittee shall amend and update the SWPPP as appropriate during the term of the permit. The permittee shall amend the SWPPP at a minimum whenever the:
 - (1) Design, operation, or maintenance of BMPs is changed;
 - (2) Design of the construction project is changed that could significantly affect the quality of the stormwater discharges;
 - (3) Permittee's inspections indicate deficiencies in the SWPPP or any BMP;
 - (4) Department notifies the permittee in writing of deficiencies in the SWPPP;
 - (5) SWPPP is determined to be ineffective in minimizing or controlling erosion and sedimentation (e.g., there is visual evidence of excessive site erosion or excessive sediment deposits in streams or lakes); and/or
 - (6) Department determines violations of water quality standards may occur or have occurred.
- 3. The permittee must ensure the design, installation, and maintenance of effective erosion and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed, and maintained to:
 - (a) Control stormwater volume and velocity within the site to minimize soil erosion;
 - (b) Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;
 - (c) Minimize the amount of soil exposed during construction activity;
 - (d) Minimize the disturbance of steep slopes;
 - (e) Minimize sediment discharges from the site. Design, install and maintain erosion and sediment controls that address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle size expected to be present on the site;
 - (f) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration and filtering, unless infeasible; and
 - (g) Minimize soil compaction and, unless infeasible, preserve topsoil.
 - (h) Capture or treat a 2-year, 24-hour storm event. A 2-year, 24-hour storm event shall be determined for the project location using the National Oceanic and Atmospheric Administration's National Weather Service Atlas 14 which can be located at <u>http://hdsc.nws.noaa.gov/hdsc/pfds/</u>.
- 4. Installation of Best Management Practices (BMPs) necessary to prevent soil erosion at the project boundary must be complete prior to the start of all phases of construction. Note: this requirement does not apply to earth disturbances related to initial site clearing and establishing entry, exit and access of the site, which may require that stormwater controls be installed immediately after the earth disturbance.
- 5. Install sediment controls along any perimeter areas of the site that will receive pollutant discharges.
 - (a) Remove any sediment per the manufacturer's instructions or before it has accumulated to one-half of the above-ground height of any perimeter control.
 - (b) For sites where perimeter controls are infeasible, other practices shall be implemented to minimize discharges to perimeter areas of the site.
- 6. BMPs shall be maintained and remain in effective operating condition during the entire duration of the permit, with repairs made within the timeframe specified elsewhere in this permit, until final stabilization has been achieved.
- 7. This permit does not authorize the placement of fill materials in flood plains, placement of solid materials into any waterway, the obstruction of stream flow, or changing the channel of a defined drainage course. The facility must contact the U.S. Army Corps of Engineers (Corps) to obtain a CWA §404 Department of Army permit.

D. LAND DISTURBANCE CONDITIONS (CONTINUED)

- 8. Minimize sediment trackout from the site.
 - (a) Restrict vehicle traffic to properly designed exit points.
 - (b) Use appropriate stabilization techniques at all points that exit onto paved roads.
 - (c) Remove any sediment that has been tracked out within the same business day or by the end of the next business day if trackout occurs on a non-business day.
- 9. The permittee (or a representative of the permittee) shall conduct regularly scheduled inspections. These inspections shall be conducted by a qualified person, one who is responsible for environmental matters at the site, or a person trained by and directly supervised by the person responsible for environmental matters at the site. For disturbed areas that have not been finally stabilized, all installed BMPs and other pollution control measures shall be inspected for proper installation, operation and maintenance. All stormwater outfalls shall be inspected for evidence of erosion or sediment deposition. When practicable the receiving stream shall also be inspected for 50 feet downstream of the outfall. Any structural or maintenance problems shall be noted in an inspection report and corrected as soon as possible but no more than seven calendar days after the inspection. All BMPs must be inspected in accordance to one of the two schedules listed below, and any changes to the frequency of inspections, including switching between the options listed below, must be documented in the SWPPP:
 - (a) At least once every seven calendar days and within 48 hours after any storm event equal to or greater than a 2-year, 24-hour storm has ceased during a normal work day and within 72 hours if the rain event ceases during a non-work day such as a weekend or holiday; or
 - (b) Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches of precipitation or greater, or the occurrence of runoff from snowmelt. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on site, or obtain the storm event information from a weather station for your location.
 - (1) Inspections are only required during normal working hours.
 - (2) You must conduct an inspection within 24 hours once a storm event has produced 0.25 inches within a 24-hour period, even if the storm event is still continuing.
 - (3) If you have elected to inspect every 14 calendar days and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.
 - (c) The SWPPP must explain how the person responsible for erosion control will be notified when stormwater runoff occurs. If weather conditions prevent correction of BMPs within seven calendar days, the reasons for the delay must be documented (including pictures) and there must be a narrative explaining why the work cannot be accomplished within the seven day time period. The documentation must be filed with the regular inspection reports. The permittee shall correct the problem as soon as weather conditions allow. Areas on-site that have been finally stabilized must be inspected at least once per month.
 - (d) A log of each inspection and copy of the inspection report shall be kept readily accessible and must be available upon request. Electronic logs are acceptable as long as reports can be provided in a timely manner. If inspection reports are kept off-site, your SWPPP must indicate where they are stored. The inspection report shall be signed by the permittee or by the person performing the inspection if duly authorized to do so. The inspection report is to include the following minimum information:
 - (1) Inspector's name;
 - (2) Date of inspection;
 - (3) Observations relative to the effectiveness of the BMPs;
 - (4) Actions taken or necessary to correct the observed problem; and
 - (5) Listing of areas where land disturbance operations have permanently or temporarily stopped.
- 10. The permittee shall be responsible for notifying each contractor or entity (including utility crews and city employees or their agents) performing work at the site of the existence of the SWPPP and what action or precautions shall be taken while on-site to minimize the potential for erosion and the potential for damaging any BMP. The permittee is responsible for any damage a subcontractor may do to established BMPs and any subsequent water quality violation resulting from the damage.

E. DOMESTIC WASTEWATER SPECIAL CONDITIONS

- 1. Lagoon freeboard shall be reported as lagoon water level in feet below the overflow level. See Special Conditions for Wastewater Irrigation System requirements.
- Emergency Discharge. Outfall #001 may only discharge if rainfall exceeds the 1-in-10 year (Data taken from the Missouri Climate Atlas) or the 24 hour, 25 year (Data taken from NRCS Urban Hydrology for Small Watersheds) rainfall events. Discharge for any other reason shall constitute a permit violation and shall be recorded in accordance with Standard Conditions, Part 1, Section B.2.b. Monitoring shall take place once per day while discharging in accordance with Part A of the permit.
- 3. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions Part I and Part III.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.
- 4. Lagoons and earthen basins shall have a liner that is designed, constructed, and maintained. If operating records indicate excessive percolation, the department may require corrective action as necessary to eliminate excess leakage.
- 5. At least one gate, constructed of materials comparable to the fence, must be provided to access the lagoon and provide for maintenance and mowing. The gate shall remain locked except when opened by the permittee to perform maintenance or mowing.
- 6. At least one sign shall appear on the fence on each side of each facility. Minimum wording shall be "Sewage Treatment Facility Keep Out", in letters at least 2 inches high.
- The inner and outer berm slopes shall not be steeper than three to one (3:1). Inner berm slopes shall not be flatter than four to one (4:1). Consideration may be given to steeper inner slopes provided special attention is given to stabilizing the slope with rip-rap, concrete, or other rigid materials.
- 8. The berms of storage basins shall be mowed and kept free of any deep rooted vegetation, burrowing animal dens, or other potential sources of damage to the berms.
- 9. <u>Wastewater Irrigation System</u>
 - (a) <u>Discharge Reporting</u>. Any unauthorized discharge from the lagoon or irrigation system shall be reported to the department as soon as possible but always within 24 hours. Discharge is allowed only as described in the Facility Description and Effluent Limitations sections of this permit.
 - (b) <u>Lagoon Operating Levels No-discharge Systems.</u> The minimum and maximum operating water levels for the storage lagoon shall be clearly marked. Each lagoon shall be operated so that the maximum water elevation does not exceed one foot below the overflow point except due to exceedances of the 1-in-10 year or 25-year, 24-hour storm events. Wastewater shall be land applied whenever feasible based on soil and weather conditions and permit requirements. Storage lagoon(s) shall be lowered to the minimum operating level prior to each winter by November 30.
 - (c) <u>Emergency Spillway.</u> Lagoons and earthen storage basins should have an emergency spillway to protect the structural integrity of earthen structures during operation at near full water levels and in the event of overflow conditions. The spillway shall be at least one foot below top of berm. The department may waive the requirement for overflow structures on small existing basins.
 - (d) <u>General Irrigation Requirements.</u> The wastewater irrigation system shall be operated so as to provide uniform distribution of irrigated wastewater over the entire irrigation site. A complete ground cover of vegetation shall be maintained on the irrigation site unless the system is approved for row crop irrigation. Wastewater shall be land applied only during daylight hours. The wastewater irrigation system shall be capable of irrigating the annual design flow during an application period of less than 100 days or 800 hours per year.
 - (e) <u>Saturated/Frozen Conditions</u>. There shall be no irrigation during frozen, snow covered, or saturated soil conditions.
 - (f) <u>Buffer Zones.</u> There shall be no irrigation within 300 feet of any down gradient pond, lake, sinkhole, losing stream or water supply withdrawal; 100 feet of gaining streams or tributaries; 150 feet of dwelling or public use areas; or 50 feet of the property line.

E. DOMESTIC WASTEWATER SPECIAL CONDITIONS (CONTINUED)

- (g) Public Access Restrictions. Public access shall not be allowed to the irrigation site(s).
- (h) <u>Operation and Maintenance Manual.</u> The permittee shall develop, maintain and implement an Operation and Maintenance (O&M) Manual that includes all necessary items to ensure the operation and integrity of the waste handling and land application systems. Copies of the O&M Manual and subsequent revisions shall be submitted to Regional Office for review and approval. The O&M Manual shall be reviewed and updated at least every five years.
- (i) <u>Nitrogen Loading Rates.</u> Wastewater irrigation rates shall not exceed a nitrogen application rate of 150 pounds total nitrogen per acre per year. Hydraulic application rates exceeding 60 inches per acre per year shall calculate nitrogen loading rates and include results in the annual report. The calculation procedures are as follows: (Total N) x (0.226) x (inches per acre irrigated) = pounds total N per acre. Where Total N = [Total Kjeldahl Nitrogen (TKN) as N] + [Nitrate Nitrogen as N]. If the applied wastewater exceeds, 150 pounds total nitrogen per acre/year, the permittee must reduce the application rates or submit a revised permit application to request use of the Plant Available Nitrogen (PAN) method based on crop nitrogen requirements for harvested crops. PAN availability factors for surface application are: [Ammonia N x 0.6] + [Nitrate N x 0.9] + [Organic N x 0.6] = PAN. The annual report shall include testing results for wastewater, soils and crop yields and calculations for nitrogen applied and crop removal of nitrogen.
- (j) <u>Equipment Checks during Irrigation</u>. The irrigation system and application site shall be visually inspected at least <u>once/day</u> during wastewater irrigation to check for equipment malfunctions and runoff from the irrigation site.

MISSOURI DEPARTMENT OF NATURAL RESOURCES STATEMENT OF BASIS MO-0101117 MONTROSE GENERATING STATION

This Statement of Basis (Statement) gives pertinent information regarding a minor modification to the above listed operating permit without the need for a public comment process. A Statement is not an enforceable part of a Missouri State Operating Permit.

Part I – Facility Information

Facility Type: industrial – categorical; land disturbance Facility Description:

This site is a former power generating facility using coal as the primary fuel source. The facility has since ceased generating power and is being dismantled. This permit covers coal combustion residual (CCR) landfill leachate, historical ash sluice wastewater (legacy leachate) as well as land disturbance activities and stormwater discharges. This permit also covers the remaining coal pile runoff, which is subject to 40 CFR 423; the coal pile is being remediated but some coal still exists at the site.

The charter number for the continuing authority for this facility is 0040080; this number was verified by the permit writer to be associated with the facility and precisely matches the continuing authority reported by the facility in the reapplication materials dated February 14, 2019.

Part II - Modification Rationale

This operating permit is hereby modified to reflect a change in ownership.

No other changes were made at this time.

Part III – Administrative Requirements

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

DATE OF FACT SHEET: (11/22/2019)

COMPLETED BY:

GORDEN WRAY, ENVIRONMENTAL SPECIALIST III MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM OPERATING PERMITS SECTION - DOMESTIC WASTEWATER UNIT (573) 751-1398 Gorden.wray@dnr.mo.gov

MISSOURI DEPARTMENT OF NATURAL RESOURCES FACT SHEET FOR THE PURPOSE OF RENEWAL OF MO-0101117 MONTROSE GENERATING STATION

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (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)(A)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:	industrial - categorical; land disturbance
SIC Code(s):	4911
NAICS Code(s):	221112
Application Date:	09/27/2013; 10/07/2013; 02/14/2019
Modification Date:	01/04/2013
Expiration Date:	03/26/2014
Last Inspection:	06/16/2016

FACILITY DESCRIPTION:

This site is a former power generating facility using coal as the primary fuel source. The facility has since ceased generating power and is being dismantled. This permit covers coal combustion residual (CCR) landfill leachate, historical ash sluice wastewater (legacy leachate) as well as land disturbance activities and stormwater discharges. This permit also covers the remaining coal pile runoff, which is subject to 40 CFR 423; the coal pile is being remediated but some coal still exists at the site.

The charter number for the continuing authority for this facility is 0040080; this number was verified by the permit writer to be associated with the facility and precisely matches the continuing authority reported by the facility in the reapplication materials dated February 14, 2019.

OUTFALL	AVERAGE FLOW	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#001	4.180 gpd	7.206 gpd	stabilization ponds	lagoon; domestic wastewater
#003	0.0653 MGD	2.9 MGD	sedimentation, neutralization	CCR landfill leachate and stormwater
#004	0.0653 MGD	2.9 MGD	sedimentation, neutralization	CCR landfill leachate and stormwater
#005	*	0.0627 MGD	sedimentation, neutralization	stormwater
#006	*	0.592 MGD	oil water separator, neutralization	stormwater
#007	*	2.127 MGD	sedimentation, neutralization	stormwater from coal pile
#008	0.0465 MGD	2.07 MGD	sedimentation, neutralization	CCR landfill leachate and stormwater

PERMITTED FEATURES TABLE:

OUTFALL	AVERAGE FLOW	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#009	*	0.436 MGD	oil water separator, neutralization	stormwater
#010	*	0.521 MGD	neutralization	stormwater
#011	no discharge	no discharge	BMPs	no discharge land application of domestic wastewater

* dependent upon precipitation

FACILITY PERFORMANCE HISTORY & COMMENTS:

The electronic discharge monitoring reports were reviewed for the last five years. However, due to all of the changes, much of the data was discarded as not applicable. The facility reported two TSS exceedances at outfall #008 in 2015, and one exceedance of settleable solids at outfall #010 in 2017. The facility was found to be in compliance at the last inspection.

FACILITY MAP:



LAGOON PROFILE CELL #1



LAGOON PROFILE CELL #2



PART II. RECEIVING WATERBODY INFORMATION

RECEIVING WATERBODY'S WATER QUALITY:

The receiving waterbody has no concurrent water quality data available. In 2013 a fish kill was observed due to atypical plant operational circumstances. KCP&L was under a partial or complete shut down at the time which reduced water flow to the discharge channel likely reducing DO. 133 fish were killed. Currently, the use is fully supported according to a 2017 use attainment assessment.

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. <u>http://dnr.mo.gov/env/wpp/waterquality/303d/303d.htm</u>

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

TOTAL MAXIMUM DAILY LOAD (TMDL):

A TMDL is a calculation of the maximum amount of a given pollutant a water body can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. 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. <u>http://dnr.mo.gov/env/wpp/tmdl/</u>

✓ Not applicable; this facility does not discharge to a waterbody/watershed with a TMDL.

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

Per Missouri's Effluent Regulations [10 CSR 20-7.015(1)(B)], waters of the state are divided into seven categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's effluent limitation table and further discussed in Part IV: Effluents Limits Determinations

- ✓ Lake or Reservoir
- ✓ All Other Waters

RECEIVING WATERBODY TABLE:

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES	12-DIGIT HUC
all	Montrose Lake	L3, 1444 acres	7208	GEN, HHP, IND, IRR, LWW, SCR, WBC-B, WWH (ALP)	Camp Creek – Deepwater Creek 10290108-0603

n/a not applicable

- Classes are hydrologic classes as defined in 10 CSR 20-7.031(1)(F). L1: Lakes with drinking water supply wastewater discharges are not permitted to occur to L1 watersheds per 10 CSR 20-7.015(3)(C); L2: major reservoirs; L3: all other public and private lakes; P: permanent streams; C: streams which may cease flow in dry periods but maintain pools supporting aquatic life; E: streams which do not maintain surface flow; and W: wetland. Losing streams are defined in 10 CSR 20-7.031(1)(O) and are designated on the Losing Stream dataset or determined by the Department to lose 30% or more of flow to the subsurface.
- WBID = Waterbody Identification: Missouri Use Designation Dataset per 10 CSR 20-7.031(1)(Q) and (S) as 8-20-13 MUDD V1.0 or newer; data can be found as an ArcGIS shapefile on MSDIS at <u>ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip;</u> New C streams described on the dataset per 10 CSR 20-7.031(2)(A)3. as 100K Extent Remaining Streams.
- Per 10 CSR 20-7.031, 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 are to be maintained in the receiving streams 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.: **ALP** = Aquatic Life Protection (formerly AQL; current uses are defined to ensure the protection and propagation of fish shellfish and wildlife, 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 ALP effluent limitations in 10 CSR 20-7.031 Table A1-A2 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 not supported in WBC-A;
- **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 and drinking of water;

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 Tables A1-B3 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

MIXING CONSIDERATIONS:

Mixing considerations were not implemented in this permit.

RECEIVING WATERBODY MONITORING REQUIREMENTS:

No receiving water monitoring requirements are recommended at this time.

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

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:

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

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

ANTIBACKSLIDING:

Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(l)] 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.
 - Material and substantial alterations or additions to the permitted facility occurred after permit issuance justify the application of a less stringent effluent limitation.
 - Outfall #002 was removed from permitting requirements as there is no longer any power generation discharge; formerly once through cooling water, unit 3 blowdown and washdown, and north and south ash pond discharges. This outfall was removed from the permit.
 - Outfall #003 and #004 changed from process wastewater (units 1, 2, & 3 hydroveyor nozzles, units 1 & 2 dewatering bins, south ash pond, pyrite pit, and neutralization pond) and landfill discharges (leachate and stormwater) to landfill discharges (leachate and stormwater) only.
 - Outfall #005 changed from metal cleaning wastewater to stormwater only.
 - Outfall #006 changed from unit 3 washdown and boiler blowdown and stormwater to stormwater only.
 - Outfall #009 changed from units 1 & 2 blowdown and washdown and stormwater to stormwater only.
 - Oil and grease limits on outfalls #005, #006, #009, and #010 were removed in favor of a benchmark. These outfalls now discharge only stormwater for which the permittee is required to establish BMPs to protect for oil and grease discharges. The benchmark is appropriate for these land disturbance outfalls. Oil water separators remain at outfalls #006 and #009.
 - ✓ Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) which would have justified the application of a less stringent effluent limitation.
 - This permit removes the limitations for settleable solids at outfall #010. While this outfall remains a stormwater outfall, the permit writer has determined, through research, TSS is a better indicator of discharges of stormwater pollution from industrial and land disturbance sites. TSS will take the place of SS at outfall #010, and the SS limit will be replaced with a TSS benchmark.
 - This facility no longer discharges process wastewater which would warrant a Whole Effluent Toxicity (WET) test. WET testing requirements were previously required at outfalls #002, #003, #004, #006, #008, and #009 were removed from the permit as a whole. Discharges from this facility are now primarily stormwater, of which toxicity has not been established.
 - ✓ 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 #005, #006, and #009 were established based on previous facility operations, however, these outfalls are now stormwater. This renewal establishes benchmarks appropriate for stormwater discharges.
 - 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.
 - A decreased sampling frequency is warranted for outfalls #005, #006, and #009 because these are now only stormwater. Outfall #005 was once per metal cleaning discharge event, outfalls #006 and #009 were monthly as unit wash water and boiler blowdown.
 - Monitoring for sulfate at outfall #008 was decreased from monthly to quarterly as data have been found to be reasonably low compared to the water quality standards.

- The previous permit required reporting precipitation for outfall #007; however, this outfall is governed by ELG limitations which are not dependent on rainfall frequency, duration, or volume therefore precipitation monitoring was determined to be irrelevant to this discharge.
- The previous permit special conditions contained a specific set of prohibitions related to general criteria (GC) 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 criteria in the previous permit. This permit assesses each general criteria as listed in the previous permit's special conditions. Federal regulations 40 CFR 122.44(d)(1)(iii) requires instances where reasonable potential (RP) to cause or contribute to an exceedance of a water quality standard exists, a numeric limitation must be included in the permit. Rather than conducting the appropriate RP determination, 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)(A) through (I) 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 while maintaining permit conditions applicable to permittee disclosures and in accordance with 10 CSR 20-7.031(4) where no water contaminant by itself or in combination with other substances shall prevent the water of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses. Removed; no RP was found based on the disclosures by the permittee. No numeric conditions were included in this permit to protect for this GC; however, this general criterion is applicable to all waters at all times per 10 CSR 20-7.031(4); the minimum BMPs required in this permit are expected to protect for this GC at all permitted features.
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses. Assessed; RP using RPD was found for the leachate outfalls and outfall #007 therefore oil and grease limitations were continued from the previous permit.
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses. GC removed; specific narrative conditions were included in this permit to protect for offensive odor for permitted features #001 and #011; numeric limitations were included at outfalls #003, #004, #007 and #008 for total suspended solids to protect for the color and turbidity GC. Additionally, this general criterion is applicable to all waters at all times per 10 CSR 20-7.031(4).
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life. Removed GC; no toxic parameters as defined by 40 CFR 401.15 were determined to be present by the permit writer at this facility therefore no numeric limitations were implemented in this permit for these toxic parameters. However, numeric limitations for pH was implemented in this permit at all discharging outfalls; while not typically considered a toxic pollutant, limitations will protect for ingestion or contact toxicity. Additionally, this general criterion is applicable to all waters at all times per 10 CSR 20-7.031(4)
 - (5) There shall be no significant human health hazard from incidental contact with the water. See (4).
 - (6) There shall be no acute toxicity to livestock or wildlife watering. See (4)
 - (7) Waters shall be free from physical, chemical, or hydrologic changes that would impair the natural biological community. Assessed; this permit continues limitations for pH and TSS where applicable. Limitations for pH will protect for chemical changes; limitations for TSS will protect for physical changes; additionally, this general criterion is applicable to all waters at all times per 10 CSR 20-7.031(4).
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247. Removed; there are no solid waste disposal activities or any operation which has reasonable potential to cause or contribute to the materials listed above being discharged through any outfall; no numeric or narrative conditions were included in this permit to protect for this condition.
- The previous permit special condition stated: "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."

The permit writer has determined this special condition was outside the scope of NPDES permitting and was removed.

The previous permit special condition stated: "Discharge of wastewater from this facility must not alone or in combination with other sources causes the receiving stream to violate the following: (a)Water temperatures and temperature differentials specified in Missouri Water Quality Standards shall be met.
 The permit writer has determined this condition is no longer applicable to this facility as this facility is no longer discharging waste heat from the processes of cooling the power plant boilers and furnaces, and therefore it was removed from this permit.

 The previous permit special condition stated: "Ash stored in on site treatment ponds (ash ponds) shall not cause a discharge to subsurface waters of the state. Ash ponds which have a leakage rate exceeding the limitations under 10 CSR 20 8.020 and 10 CSR 20 8.200 are discharges to waters of the state and must by authorized by permit." The permit writer believes with is an unenforceable condition without exploration into any discharges which may be occurring. The permit writer has determined this condition is not enforceable as stated therefore was removed. However, the facility is required to submit all groundwater monitoring data with the next permit renewal. These data have the ability to show if discharges are occurring.

The previous permit special condition stated: "All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measure."

The permit writer has determined this condition was outside the scope of the NPDES program therefore was removed from the permit.

The previous permit special condition stated: "Water from the Utility Waste Landfill Settling Pond should be utilized for dust suppression on the landfill, if possible."

The permit writer has determined this requirement is not enforceable in NPDEA permits therefore was removed.

ANTIDEGRADATION REVIEW:

Process water discharges with new, altered, or expanding flows, the Department is to document, by means of antidegradation review, if the use of a water body's available assimilative capacity is justified. 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 ✓

Applicable; the facility had an antidegradation review in 2011 for outfall #008 for landfill leachate.

This permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) which must include an alternative analysis (AA) of the BMPs. The SWPPP must be developed, implemented, updated, and maintained at the facility. Failure to implement and maintain the chosen alternative, is a permit violation. The AA is a structured evaluation of BMPs to determine which are reasonable and cost effective. Analysis should include practices designed to be 1) non-degrading, 2) less degrading, or 3) degrading water quality. The chosen BMP will be the most reasonable and cost effective while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The analysis must demonstrate why "no discharge" or "no exposure" are not feasible alternatives at the facility. Existing facilities with established SWPPPs and BMPs need not conduct an additional alternatives analysis unless new BMPs are established to address BMP failures or benchmark exceedances. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.015(9)(A)5 and 7.031(3). For stormwater discharges with new, altered, or expanding discharges, the stormwater BMP chosen for the facility, through the AA 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.

CHANGES IN DISCHARGES OF TOXIC POLLUTANT:

This special condition reiterates the federal rules found in 40 CFR 122.44(f) and 122.42(a)(1). In these rules, the facility is required to report changes in amounts of toxic substances discharged. Toxic substances are defined in 40 CFR 122.2 as "...any pollutant listed as toxic under section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing section 405(d) of the CWA." Section 307 of the clean water act then refers to those parameters found in 40 CFR 401.15. The permittee should also consider any other toxic pollutant in the discharge as reportable under this condition.

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.

 \checkmark Not applicable; the permittee/facility is not currently under Water Protection Program enforcement action.

DOMESTIC WASTEWATER:

Domestic wastewater is defined as wastewater (i.e., human sewage) originating primarily from the sanitary conveniences of residences, commercial buildings, factories, and institutions, including any water which may have infiltrated the sewers. Domestic wastewater excludes stormwater, animal waste, process waste, and other similar waste.

✓ Applicable; this facility land applies domestic wastewater. See page 2 of the permit, outfall #001. During saturated conditions when the lagoon becomes too full, then the facility pumps and hauls the wastewater to a permitted POTW.

EFFLUENT LIMITATION GUIDELINE:

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

✓ The facility has an associated Effluent Limit Guideline (ELG) at 40 CFR 423 applicable to the wastewater and certain stormwater discharges at this site, and is applied under 40 CFR 125.3(a). Should Reasonable Potential be established for any particular parameter, and water-quality derived effluent limits are more protective of the receiving water's quality, the WQS will be used as the limiting factor in accordance with 40 CFR 122.44(d) and 10 CSR 20-7.015(9)(A). See Part IV: EFFLUENT LIMITS DETERMINATION.

GENERAL CRITERIA CONSIDERATIONS:

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

GROUNDWATER MONITORING:

Groundwater is a water of the state according to 10 CSR 20-2.010(82), and is subject to regulations at 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6) and must be protected accordingly.

- ✓ This facility has indicated they are clean closing the former ash ponds at this site therefore the water protection program has determined the facility is not required to initiate groundwater monitoring specifically for the water protection program at this time. The term "clean closure" is the common industry term used to indicate "closure by removal of CCR" defined at 40 CFR 257.102(c): "An owner or operator may elect to close a CCR unit by removing and decontaminating all areas affected by releases from the CCR unit. CCR removal and decontamination of the CCR unit are complete when constituent concentrations throughout the CCR unit and any areas affected by releases from the CCR unit have been removed and groundwater monitoring concentrations do not exceed the groundwater protection standard established pursuant to §257.95(h) for constituents listed in appendix IV to this part."
- ✓ The landfill and former ash ponds are being monitored for the solid waste program and under the federal CCR rules under 40 CFR 257 Subtitle D. A special condition directs the permittee to submit all groundwater monitoring data obtained from January 1, 2018 to the time of application with the application renewal materials. The facility should submit this data electronically, either on a CD/DVD or a thumb drive, or other appropriate method.

MAJOR WATER USER:

Any surface or groundwater user with a water source and the equipment necessary to withdraw or divert 100,000 gallons (or 70 gallons per minute) or more per day combined from all sources from any stream, river, lake, well, spring, or other water source is considered a major water user in Missouri. All major water users are required by law to register water use annually (Missouri Revised Statues Chapter 256.400 Geology, Water Resources, and Geodetic Survey Section). <u>https://dnr.mo.gov/pubs/pub2337.htm</u> ✓ Not applicable; this permittee cannot withdraw water from the state in excess of 70 gpm/0.1 MGD.

NO-DISCHARGE LAND APPLICATION:

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

✓ Applicable; this permit authorizes operation of a no-discharge land application system to treat domestic wastewater. See permitted feature #011.

OIL/WATER SEPARATORS:

Oil water separators (OWS) are frequently found at industrial sites where process water and stormwater may contain oils and greases, oily wastewaters, or other immiscible liquids requiring separation. Food industry discharges typically require pretreatment prior to discharge to municipally owned treatment works. Per 10 CSR 26-2.010(2)(B), oil water separators must be operated according to manufacturer's specifications and authorized in NPDES permits or may be regulated as a petroleum tank.

Applicable; the OWS, as disclosed by the permittee, discharge to outfalls #006 and #009, and these outfalls contain appropriate parameters as determined by the permit writer. Sludge generated by OWS is subject to Standard Conditions Part III. See SLUDGE – INDUSTRIAL below.

REASONABLE POTENTIAL (RP):

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants which are (or may be) discharged at a level causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. Per 10 CSR 20-7.031(4), general criteria shall be applicable to all waters of the state at all times; however, acute toxicity criteria may be exceeded by permit in zones of initial dilution, and chronic toxicity criteria may be exceeded by permit in mixing zones. If the permit writer determines any given pollutant has the reasonable potential to cause or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for the pollutant per 40 CFR Part 122.44(d)(1)(iii) and the most stringent limits per 10 CSR 20-7.031(9)(A). Permit writers may use mathematical reasonable potential analysis (RPA) using the Technical Support Document for Water Quality Based Toxics Control (TSD) methods (EPA/505/2-90-001) as found in Section 3.3.2, or may also use reasonable potential determinations (RPD) as provided in Sections 3.1.2, 3.1.3, and 3.2 of the TSD.

- Applicable; the permit writer conducted an RPD on applicable parameters within the permit. See Part IV: Effluent Limits Determinations below. A mathematical 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 necessarily dependent on 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 discharge monitoring data for the last five years and comparing those data to narrative or numeric water quality criteria.
- Permit writers use the Department's permit writer's manual (<u>http://dnr.mo.gov/env/wpp/permits/manual/permit-manual.htm</u>), the EPA's permit writer's manual (<u>https://www.epa.gov/npdes/npdes-permit-writers-manual</u>), 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. A SOC is not allowed:

- For effluent limitations based on technology-based standards established in accordance with federal requirements, if the deadline for compliance established in federal regulations has passed. 40 CFR § 125.3.
- For a newly constructed facility in most cases. Newly constructed facilities must meet applicable effluent limitations when discharge begins, because the facility has installed the appropriate control technology as specified in a permit or antidegradation review. A SOC is allowed for a new water quality based effluent limit not included in a previously public noticed permit or antidegradation review, which may occur if a regulation changes during construction.
- To develop a TMDL, UAA, or other study associated with development of a site-specific criterion. A facility is not prohibited from conducting these activities, but a SOC may not be granted for conducting these activities.

In order to provide guidance in developing SOCs, and to attain a greater level of consistency, the Department issued a policy on development of SOCs on October 25, 2012. The policy provides guidance to permit writers on standard time frames for schedules for common activities, and guidance on factors to modify the length of the schedule.

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

SPILL REPORTING:

Per 260.505 RSMo, any emergency involving a hazardous substance must be reported to the Department's 24hour 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. <u>http://dnr.mo.gov/env/esp/spillbill.htm</u>

SLUDGE - DOMESTIC BIOSOLIDS:

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: <u>http://extension.missouri.edu/main/DisplayCategory.aspx?C=74</u> (WQ422 through WQ449).

✓ Applicable, this permit does not authorize land application of biosolids. Sludge/biosolids are stored in the lagoon. The permitted management strategy must be followed, see page 2 of the permit. If the permitted management strategy cannot be followed, the permittee must obtain a permit modification. See Standard Conditions Part III.

SLUDGE - INDUSTRIAL:

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.

✓ Applicable; this permit does not authorize land application of industrial sludge. Sludges are removed by contract hauler. The permitted management strategy must be followed, see page 2 of the permit. If the permitted management strategy cannot be followed, the permittee must obtain a permit modification. See Standard Conditions Part III.

STANDARD CONDITIONS:

The standard conditions Part I attached to this permit incorporate all sections of 40 CFR 122.41(a) through (n) by reference as required by law. These conditions, in addition to the conditions enumerated within the standard conditions should be reviewed by the permittee to ascertain compliance with this permit, state regulations, state statues, federal regulations, and the Clean Water Act. Standard Conditions Part III, if attached to this permit, incorporate all requirements dealing with sludges.

STORMWATER PERMITTING: LIMITATIONS AND BENCHMARKS:

Because of the fleeting nature of stormwater discharges, the Department, under the direction of EPA guidance, has determined monthly averages are capricious measures of stormwater 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 as dictated by site specific conditions, the BMPs in place, past performance of the facility, and the receiving water's current quality.

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

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

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

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

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

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

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

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

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

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

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*, (EPA 833-B-09-002) published by the EPA in 2015 https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf, BMPs are measures or practices used to reduce the amount of pollution entering waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally, in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to 1) identify sources of pollution or contamination, and 2) select and carry out actions which prevent or control the pollution of storm water discharges. Additional information can be found in *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* (EPA 832-R-92-006; September 1992).

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

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

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

Alternative Analysis (AA) evaluation of the BMPs is a structured evaluation of BMPs which 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 benchmark exceedances continue to occur and the permittee feels there are no practicable or costeffective 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: https://dnr.mo.gov/forms/#WaterPollution

✓ Applicable; a SWPPP shall be developed and implemented for this facility. The SWPPP must include provisions as indicated in Part D of the permit for all activities including land disturbance activities.

UNDERGROUND INJECTION CONTROL (UIC):

The UIC program for all classes of wells in the State of Missouri is administered by the Missouri Department of Natural Resources and approved by EPA pursuant to section 1422 and 1425 of the Safe Drinking Water Act (SDWA) and 40 CFR 147 Subpart AA. Injection wells are classified based on the liquids which are being injected. Class I wells are hazardous waste wells which are banned by RSMo 577.155; Class II wells are established for oil and natural gas production; Class III wells are used to inject fluids to extract minerals; Class IV wells are also banned by Missouri in RSMo 577.155; Class V wells are shallow injection wells; some examples are heat pump wells and groundwater remediation wells. Domestic wastewater being disposed of sub-surface is also considered a Class V well. In accordance with 40 CFR 144.82, construction, operation, maintenance, conversion, plugging, or closure of injection wells shall not cause movement of fluids containing any contaminant into Underground Sources of Drinking Water (USDW) if the presence of any contaminant may cause a violation of drinking water standards or groundwater standards under 10 CSR 20-7.031, or other health based standards, or may otherwise adversely affect human health. If the director finds the injection activity may endanger USDWs, the Department may require closure of the injection wells, or other actions listed in 40 CFR 144.12(c), (d), or (e). In accordance with 40 CFR 144.26, the permittee shall submit a Class V Well Inventory Form for each active or new underground injection well drilled, or when the status of a well changes, to the Missouri Department of Natural Resources, Geological Survey Program, P.O. Box 250, Rolla, Missouri 65402. The Class V Well Inventory Form can be requested from the Geological Survey Program or can be found at the following web address: <u>http://dnr.mo.gov/forms/780-1774-f.pdf</u>

✓ Not applicable; the permittee has not submitted materials indicating the facility will be performing UI at this site.

VARIANCE:

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

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

WATER QUALITY STANDARD REVISION:

In accordance with section 644.058, RSMo, the Department is required to utilize an evaluation of the environmental and economic impacts of modifications to water quality standards of twenty-five percent or more when making individual site-specific permit decisions.

✓ This operating permit does not contain requirements for a permit limit based on a water quality standard which has changed twenty-five percent or more since the previous operating permit.

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 not provide adequate protection for the receiving water, then the other must be used per 10 CSR 20-7.015(9)(A).

✓ 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

- Acute wasteload allocations designated as 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).
- Chronic wasteload allocations designated as monthly average limits (AML) were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ).
- Water quality based MDL and AML 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; 3/1991.
- 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.

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PART IV. EFFLUENT LIMITS DETERMINATIONS

Effluent limitations derived and established for this permit are based on current operations of the facility and applied per 10 CSR 20-7.015(9)(A). 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 which supersede the terms and conditions, including effluent limitations, of this operating permit. Daily maximums and monthly averages are required per 40 CFR 122.45(d)(1) for continuous discharges (not from a POTW).

PERMITTED FEATURES #001 & #011 – DOMESTIC WASTEWATER LAGOON & IRRIGATION FIELD

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	Unit	Daily Max	Monthly Avg.	PREVIOUS PERMIT LIMITS	Minimum Sampling Frequency	Reporting Frequency	Sample Type
Physical					=		
FREEBOARD (#001)	feet	*		SAME	DAILY	MONTHLY	24 Hr. Tot
IRRIGATION (#011)							
IRRIGATION PERIOD	hours	*		SAME	DAILY	MONTHLY	MEASURED
IRRIGATION VOLUME	gallons	*		SAME	DAILY	MONTHLY	TOTAL
APPLICATION AREA	acres	*		SAME	DAILY	MONTHLY	TOTAL
APPLICATION RATE	inches/acre	*		SAME	DAILY	MONTHLY	TOTAL
IRON, TOTAL RECOVERABLE	mg/L	*		SAME	ANNUALLY	ANNUALLY	GRAB
KJELDAHL NITROGEN AS N	mg/L	*		SAME	ANNUALLY	ANNUALLY	GRAB
MAGNESIUM, TOTAL RECOVERABLE	mg/L	*		SAME	ANNUALLY	ANNUALLY	GRAB
Phosphorus, Total	mg/L	*		SAME	ANNUALLY	ANNUALLY	GRAB
EMERGENCY DISCHARGE (#001)							
FLOW	MGD	*		SAME	DAILY	NEXT MO.	24 Hr Tot
Ammonia, Total as N	mg/L	*		SAME	DAILY	NEXT MO.	GRAB
BOD5	mg/L	*		SAME	DAILY	NEXT MO.	GRAB
E. coli	#/100 mL	*		NEW DAILY NEXT M		NEXT MO.	GRAB
рН	SU	*		SAME	DAILY	NEXT MO.	GRAB
TSS	mg/L	*		SAME	DAILY	NEXT MO.	GRAB

* Monitoring and reporting requirement only

† Report the minimum and maximum pH values; pH is not to be averaged

daily once per day of each discharge

next mo the facility must report any discharge data for the month by the 28th day of the following month

DERIVATION AND DISCUSSION OF LIMITS:

LAGOON REQUIREMENTS:

Freeboard

Monitoring of freeboard continued from previous permit. Monitoring is required to determine if the facility is properly managing the freeboard at this facility.

Precipitation

Previous permit required reporting this parameter to the department; the permit writer does not believe reporting is required henceforth; however, the facility is required to monitor the freeboard, and only apply wastewater when approved in special conditions which will necessitate the facility determine if any precipitation events have occurred causing saturated soil conditions.

EMERGENCY DISCHARGE:

Flow

The facility shall determine the total flow for each day of discharge.

Ammonia, total as N

The facility shall monitor total ammonia each day of discharge.

Biochemical Oxygen Demand 5-Day

The facility shall monitor BOD-5 each day of discharge.

<u>E. coli</u>

The facility shall monitor *E. coli* each day of discharge to determine if any recreational uses were inhibited during the discharge. The previous permit required monitoring of total coliform, however, Missouri's WQS do not include total coliform but do include *E. coli* therefore the parameter was changed.

<u>рН</u>

The facility shall monitor the pH each day of the discharge.

Total Suspended Solids (TSS)

The facility shall monitor the TSS content of the discharge each day the lagoon discharges.

IRRIGATION WASTEWATER AND FIELD:

Irrigation Period

The facility shall record the hours of irrigation completed each day to assure the irrigated wastewater does not exceed the hydraulic loading capacity of the soils.

Irrigated Volume

The facility shall record the volume of irrigation completed each day to assure the volume of irrigated wastewater does not exceed the hydraulic loading capacity of the soils.

Application Area

The facility shall record the acres of land irrigated each day to report the acres used when irrigating.

Application Rate

The facility shall record the rate of wastewater irrigated in inches per acre each day to assure the irrigated wastewater does not exceed the hydraulic loading capacity of the soils.

Iron, Total Recoverable

The facility shall monitor the irrigated wastewater for iron annually to assure the irrigated wastewater is not negatively affecting the soil productivity. Soil productivity is the inherent capacity of a soil to support the growth of specified plants, plant communities, or a sequence of plant communities. Soil productivity may be expressed in terms of volume or weight/unit area/year, percent plant cover, or other measures of biomass accumulation.

Kjeldahl Nitrogen as N, Total (TKN)

The facility shall monitor the irrigated wastewater for TKN annually to assure soil productivity is maintained.

Magnesium, Total

The facility shall monitor the irrigated wastewater for magnesium annually go assure soil productivity is maintained.

Phosphorus, Total as P (TP)

The facility shall monitor the irrigated wastewater for phosphorus annually to assure soil productivity is maintained.

LANDFILL OUTFALLS #003, #004, & #008 - LANDFILL STORMWATER AND LEACHATE

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	Unit	Daily Max	Monthly Avg.	PREVIOUS PERMIT LIMITS	Minimum Sampling Frequency	Reporting Frequency	Sample Type
PHYSICAL							
FLOW	MGD	*	*	SAME	ONCE/MONTH	ONCE/MONTH	24 Hr. Tot
CONVENTIONAL							
OIL & GREASE	mg/L	15	10	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
PH †	SU	6.5 то 9.0	6.5 то 9.0	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
TOTAL SUSPENDED SOLIDS (TSS) OUTFALLS #003 & #004	mg/L	100	30	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
TOTAL SUSPENDED SOLIDS (TSS) OUTFALL #008	mg/L	50	30	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
METALS							
Arsenic, TR	μg/L	*	*	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
Boron, TR	μg/L	*	*	MG/L	ONCE/MONTH	ONCE/MONTH	GRAB
Mercury, Total	μg/L	*	*	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
Molybdenum, TR	μg/L	*	*	MG/L	ONCE/MONTH	ONCE/MONTH	GRAB
Other							
Chloride	mg/L	*	*	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
Sulfate	mg/L	*	*	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
CHLORIDE PLUS SULFATE	mg/L	*	*	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB

* Monitoring and reporting requirement only

** Monitoring with associated benchmark

* Report the minimum and maximum pH values; pH is not to be averaged

NEW parameter not established in previous state operating permit

TR Total Recoverable

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to 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), monthly monitoring continued from previous permit.

CONVENTIONAL:

Oil & Grease

15 mg/L daily maximum; 10 mg/L monthly average; continued from previous permit (all outfalls). An antidegradation review completed in 2011 for outfall #008 determined these were appropriate limitations for leachate discharges. Conventional pollutant [10 CSR 20-7.031 Table A1]: *Criteria for Designated Uses and Health Advisory Levels*; 10 mg/L chronic standard. 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. 40 CFR 423.15(a)(3) limits of 20 mg/L daily maximum and 15 mg/L monthly average are less protective therefore the antidegradation/water quality limitations will be used.

<u>рН</u>

6.5 to 9.0 SU – instantaneous grab sample. Water quality limits [10 CSR 20-7.031(5)(E)] are applicable to these outfalls. Leachate has potential to cause numeric exceedances of pH if not managed appropriately. Continued from previous permit (all outfalls). Technology limitations are not as stringent therefore will not be used.

Total Suspended Solids (TSS)

Outfalls #003 and #004: Limits of 100 mg/L daily maximum and 30 mg/L monthly average; continued from previous permit. This facility's description in the past indicated ash pond stormwater was approved for discharge at outfalls #003 and #004. However, the new definition of leachate provided in the 2015 update of the ELG at 40 CFR 423 includes contact stormwater (identified as leachate) for ash. As this facility no longer sluices ash, the ponds discharging through these outfalls only receive contact and non-contact water from the landfill. Federal Register Vol. 80 No. 212; 11/3/2015 indicates the definition of leachate now includes contact stormwater found at 40 CFR 412.11(r); prior versions of the ELG did not include a definition of leachate. The permit writer is using best professional judgment to apply effluent limitations found in 40 CFR 423.15(a)(3) to the discharges at outfalls #003 and #004; which is the same as found in the previous permit for ash transport wastewater at 40 CFR 423.12(b)(4); an unknown volume of legacy ash transport wastewater is still present at the site. Antidegradation is not applicable to the new description as the wastewater composition has not changed; the wastewater being discharged has a much lower volume than the previous permit because ash sluicing has ceased.

Outfall #008: 50 mg/L daily maximum, 30 mg/L monthly average; limits continued from previous permit. An antidegradation review in 2011 for outfall #008 determined 50/30 were appropriate limitations for this leachate discharges.

The TSS limits implemented in this permit are expected to also protect water quality during land disturbance activities.

METALS:

Arsenic, Total Recoverable

Quarterly monitoring required. The ELG at 40 CFR 423.15(b)(16), for sources built 2015 or later, discusses arsenic as a combustion residual leachate constituent however, the source was built prior to 2015 which makes this section of the rule inapplicable. This is a new monitoring requirement based on the permit writer's best professional judgment employing the data obtained by the EPA in developing the ELG. The facility reported <10 μ g/L for this parameter; the test method used was not sensitive enough to determine compliance with ELG limitations, but was sufficiently sensitive to determine compliance with the WQS. ELG limitations are 11 μ g/L daily maximum and 8 μ g/L monthly average; Missouri's water quality standards are 20 μ g/L, chronic only. Arsenic was also considered as a present pollutant in the 2011 antidegradation review.

Boron, Total Recoverable

The previous permit required monthly monitoring; continued. The facility reported from 122 to $1010 \ \mu g/L$ for this parameter. Boron is a known constituent of coal ash residuals. Missouri's water quality standards are for drinking water and groundwater (2000 $\mu g/L$) but this is a surface water discharge to a non-drinking water lake, therefore these water quality standards are not applicable. Monitoring is continued based on the permit writer's best professional judgment. Additionally, continued monitoring will allow the permittee to determine if any numeric spikes in this parameter are occurring which would show a problem with the landfill, collection system, or containment structures; if monitoring spikes are found, the facility should determine the cause of the spikes and work towards a solution. Units were changed from mg/L to $\mu g/L$ to provide permit continuity within this permit and other permits for this metalloid. In the future if the leachate is found to have values exceeding a specified technology-based control, a site specific technology limitation may be developed for this parameter.

Mercury, Total Recoverable

Quarterly monitoring required. The ELG at 40 CFR 423.15(b)(16), for sources built 2015 or later, discusses mercury as a combustion residual leachate constituent; however, the source was built prior to 2015 which makes this section of the rule inapplicable. This is a new monitoring requirement based on the permit writer's best professional judgment employing the data obtained by the EPA in developing the ELG. The facility reported <0.2 μ g/L for this parameter. ELG limitations are 0.788 μ g/L daily maximum and 0.356 μ g/L monthly average; Missouri's water quality standards are 2.4 μ g/L acute and 0.5 μ g/L chronic. The permit writer has determined monitoring is required, but because the permittee reported non-detect, is eligible for less frequent testing method.

Molybdenum, Total Recoverable

The previous permit required monthly monitoring; continued. The facility reported from 14 to 70 μ g/L for this parameter. Molybdenum is a known constituent of coal ash residuals. However, there are no water quality standards for molybdenum. Monitoring is continued based on the permit writer's best professional judgment. Additionally, continued monitoring will allow the permittee to determine if any numeric spikes in this parameter are occurring which would show a problem with the landfill, collection system, or containment structures. In the future if the leachate is found to have values exceeding a specified technology-based control, a site specific technology limitation may be developed for this parameter.

OTHER:

Chloride

Quarterly monitoring requirement, new. The facility reported 4.5 mg/L for this parameter at outfall #008 in the application for renewal. See chloride plus sulfate below.

<u>Sulfate</u>

The facility reported from 99 to 189 mg/L for this parameter. The previous permit required monthly monitoring, reduced to quarterly, but maintained in the permit because sulfate is a known contaminant of coal ash leachate. However, there are no water quality limitations for this parameter by itself. See chloride plus sulfate below. Monitoring is continued based on the permit writer's best professional judgment to assure leachate discharges remain practical and reasonable for this parameter.

Chloride Plus Sulfate

Quarterly monitoring required, new. Sulfate is a known contaminant of coal ash and coal ash leachate. Monitoring is required to assure leachate discharges are not negatively affecting the receiving waterbody. Chloride plus sulfate was identified in the 2011 antidegradation review as present at 537.7 mg/L; the limit for the discharge would be 1000 mg/L if applied in the future.

STORMWATER OUTFALLS #005, #006, #009, & #010 - INDUSTRIAL STORMWATER - LAND DISTURBANCE

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	Unit	Daily Maximum Limit	Bench- Mark	PREVIOUS PERMIT LIMITS	Minimum Sampling Frequency	Reporting Frequency	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*	-	SAME	ONCE/QUARTER	QUARTERLY	24 hr. estimate
CONVENTIONAL							
COD	mg/L	**	120	NEW	ONCE/QUARTER	QUARTERLY	GRAB
OIL & GREASE	mg/L	**	10	15/10	ONCE/QUARTER	QUARTERLY	GRAB
PH [†]	SU	6.5-9.0	-	SAME	ONCE/QUARTER	QUARTERLY	GRAB
TSS	mg/L	**	100	100/30	ONCE/QUARTER	QUARTERLY	GRAB
METALS							
ALUMINUM, TR	μg/L	*	-	NEW	ONCE/QUARTER	QUARTERLY	GRAB

Monitoring and reporting requirement only

** Monitoring with associated benchmark

† Report the minimum and maximum pH values; pH is not to be averaged

NEW parameter not established in previous state operating permit

TR Total Recoverable

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to estimate 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), quarterly monitoring required.

CONVENTIONAL:

Chemical Oxygen Demand (COD)

Monitoring with a benchmark of 120 mg/L is included using the permit writer's best professional judgment. There is no numeric water quality standard for COD; however, increased oxygen demand may impact instream water quality. COD is also a valuable indicator parameter. COD monitoring allows the permittee to identify increases in COD may indicate materials/chemicals coming into contact with stormwater causing an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs. The benchmark value falls within the range of values implemented in other permits having similar industrial activities and is achievable through proper BMP controls. The permit writer has determined this benchmark to also be applicable to land disturbance activities.

Oil & Grease

Monitoring with a daily maximum benchmark of 10 mg/L. Previous permit was 15 mg/L daily maximum; 10 mg/L monthly average; see Part III, ANTIBACKSLIDING. Oil and grease is considered a conventional pollutant. Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. The test can also detect some volatile organics such as benzene, toluene, ethylbenzene, or 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 A1: *Criteria for Designated Uses*; 10 mg/L is the standard for protection of aquatic life. This standard will also be used to protect the general criteria found at 10 CSR 20: 7.031 (4). Ten mg/L is the level at which sheen is expected to form on receiving waters. Oils and greases of different densities will possibly form sheen or unsightly bottom deposits at levels which vary from 10 mg/L. To protect the general criteria, it is the responsibility of the permittee to visually observe the discharge and receiving waters for sheen or bottom deposits. The benchmark is achievable through proper operational and maintenance of BMPs and falls within the range of values implemented in other permits having similar industrial activities.

pН

6.5 to 9.0 SU – instantaneous grab sample. Water quality limits [10 CSR 20-7.031(5)(E)] are applicable to this outfall as land disturbance is being conducted. Contaminants in the soil cannot cause or contribute to exceedances of this parameter. Continued from the previous permit.

Settleable Solids (SS)

The previous permit required monitoring with limits of 2.0 mL/L/hr daily maximum and 1.0 mL/L/hr monthly average for SS at outfall #010. However, the permit writer has determined a benchmark at all the stormwater outfalls for TSS (see below) to be more appropriate. See Part III: ANTIBACKSLIDING.

Total Suspended Solids (TSS)

Monitoring with a daily maximum benchmark of 100 mg/L. There is no numeric water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS indicating uncontrolled materials leaving the site. Increased suspended solids in runoff can lead to decreased available oxygen for aquatic life and an increase of surface water temperatures in a receiving stream. Suspended solids can also be carriers of toxins, which can adsorb to the suspended particles; therefore, total suspended solids are a valuable indicator parameter for other pollution. The benchmark is achievable through proper operational and maintenance of BMPs and falls within the range of values implemented in other permits having similar industrial activities. This benchmark is suitable to stormwater runoff from land disturbance activities.

METALS:

Aluminum, Total Recoverable

The permit writer has determined aluminum is a pollutant of concern in this facility's stormwater discharges. Monitoring is required. The source of aluminum is unknown at this time.

OUTFALL #007 - COAL PILE RUNOFF STORMWATER

PARAMETERS	Unit	Daily Max	Monthly Avg.	PREVIOUS PERMIT LIMITS	Minimum Sampling Frequency	Reporting Frequency	Sample Type
Physical				=			
FLOW	MGD	*	*	SAME	ONCE/MONTH	MONTHLY	24 Hr. Tot
CONVENTIONAL							
OIL & GREASE	mg/L	15	10	SAME	ONCE/MONTH	MONTHLY	GRAB
рН [†]	SU	6.5 то 9.0	6.5 to 9.0	SAME	ONCE/MONTH	MONTHLY	GRAB
TOTAL SUSPENDED SOLIDS (TSS)	mg/L	50	50	SAME	ONCE/MONTH	MONTHLY	GRAB
Other							
Chloride	mg/L	*	*	NEW	ONCE/MONTH	MONTHLY	GRAB
SULFATE	mg/L	*	*	NEW	ONCE/MONTH	MONTHLY	GRAB
CHLORIDE PLUS SULFATE	mg/L	*	*	NEW	ONCE/MONTH	MONTHLY	GRAB

EFFLUENT LIMITATIONS TABLE:

* Monitoring and reporting requirement only

† Report the minimum and maximum pH values; pH is not to be averaged

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to 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), monthly monitoring continued from previous permit.

Precipitation

Monitoring removed; the permit writer has determined submitting information about precipitation to not be required for this outfall; the facility has ELG limitations which must be met regardless of rainfall frequency, duration, or volume; and SWPPP requirements which may be different.

CONVENTIONAL:

Oil & Grease

15 mg/L daily maximum; 10 mg/L monthly average; continued from previous permit; conventional pollutant [10 CSR 20-7.031 Table A1] and possibly present in stormwater at this site dependent upon installed BMPS at the site. *Criteria for Designated Uses and Health Advisory Levels*; 10 mg/L monthly average (chronic standard). 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. The permit writer intends these O&G limits to also be protective of land disturbance activities.

pН

 $\overline{6.5}$ to 9.0 SU – instantaneous grab sample. Water quality limits [10 CSR 20-7.031(5)(E)] are applicable to this outfall. Continued from the previous permit; ELG limitations are not protective enough of the receiving stream therefore water quality limits were used.

Total Suspended Solids (TSS)

50 mg/L daily maximum technology-based effluent limitations per 40 CFR 423.12(b)(9) and 50 mg/L monthly average per best professional judgment and continuation from the previous permit to conform to antibacksliding regulations. The permit writer intends these TSS limits to also be protective of water quality during land disturbance activities.

OTHER:

Chloride, Sulfate, and Chloride plus Sulfate

The permit writer believes sulfate to be a contaminant of concern at this outfall. Because sulfate standards consider the combination of chloride and sulfate as one pollutant, the permit writer believes monitoring of both chloride and sulfate to be applicable to this outfall.

PART V. SAMPLING AND REPORTING REQUIREMENTS

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

ELECTRONIC DISCHARGE MONITORING REPORT (EDMR) SUBMISSION SYSTEM:

The U.S. Environmental Protection Agency (EPA) promulgated a final rule on October 22, 2015, to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. The 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: <u>http://dnr.mo.gov/forms/780-2692-f.pdf</u>. 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 not transferable.

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

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

SAMPLING FREQUENCY JUSTIFICATION:

Sampling and reporting frequency was generally decreased from previous permit. 40 CFR 122.45(d)(1) indicates all continuous discharges shall be permitted with daily maximum and monthly average limits. Minimum sampling frequency for all parameters is annually per 40 CFR 122.44(i)(2). The facility has been shut down and this facility discharges primarily stormwater, and some landfill leachate at this time. Sampling frequencies were adjusted accordingly.

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

SAMPLING TYPE JUSTIFICATION:

Sampling type was continued from the previous permit. 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, volatile organic compounds, and others.

SUFFICIENTLY SENSITIVE ANALYTICAL METHODS:

Please review Standard Conditions Part 1, section A, number 4. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 and/or 40 CFR 136 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is "sufficiently sensitive" when; 1) the method quantifies the pollutant below the level of the applicable water quality criterion or; 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility's discharge is high enough the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015 and or 40 CFR 136. These methods are also required for parameters listed as monitoring only, as the data collected may be used to determine if numeric limitations need to be established. A permittee is responsible for working with their contractors to ensure the analysis performed is sufficiently sensitive. 40 CFR 136 lists the approved methods accepted by the Department. Tables A1-B3 at 10 CSR 20-7.031 shows water quality standards.

PART VI. ADMINISTRATIVE REQUIREMENTS

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

PERMIT SYNCHRONIZATION:

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. <u>http://dnr.mo.gov/env/wpp/cpp/docs/watershed-based-management.pdf</u>. 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 two years old, such 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 be issued for a period of five years. In a comment letter dated March 15, 2019, the facility explained several reasons why a shortened permit term would not provide benefit to the state or facility. This facility is being decommissioned; if the permit expired in 2021, the facility would still be in transition therefore requiring a modification in the future. With a five year permit, the facility decommissioning is expected to be finished therefore can provide representative sampling for the renewal.

PUBLIC NOTICE:

The Department shall give public notice a draft permit has been prepared and its issuance is pending.

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

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

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments. \checkmark The Public Notice period for this operating permit was from April 12, 2019 to May 12, 2019; no comments were received.

DATE OF FACT SHEET: MAY 17, 2019

COMPLETED BY:

PAM HACKLER, ENVIRONMENTAL SCIENTIST MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM OPERATING PERMITS SECTION - INDUSTRIAL UNIT (573) 526-3386 pam.hackler@dnr.mo.gov



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.
- Test Procedures. The analytical and sampling methods used shall conform 4. 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 (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.

- 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.
 - 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 28^{th} 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
 - 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.
- It is unlawful for any person to cause or permit any discharge of water d. 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;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:
 - 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 noncompliance 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.

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

SECTION A – GENERAL REQUIREMENTS

- This permit pertains to sludge requirements under the Missouri Clean Water Law and regulation for domestic wastewater and industrial process wastewater. This permit also incorporates applicable federal sludge disposal requirements under 40 CFR 503 for domestic wastewater. The Environmental Protection Agency (EPA) has principal authority for permitting and enforcement of the federal sludge regulations under 40 CFR 503 for domestic wastewater. EPA has reviewed and accepted these standard sludge conditions. EPA may choose to issue a separate sludge addendum to this permit or a separate federal sludge permit at their discretion to further address the federal requirements.
- These PART III Standard Conditions apply only to sludge and biosolids generated at domestic wastewater treatment facilities, including public owned treatment works (POTW), privately owned facilities and sludge or biosolids generated at industrial facilities.
- 3. Sludge and Biosolids Use and Disposal Practices:
 - a. The permittee is authorized to operate the sludge and biosolids treatment, storage, use, and disposal facilities listed in the facility description of this permit.
 - b. The permittee shall not exceed the design sludge volume listed in the facility description and shall not use sludge disposal methods that are not listed in the facility description, without prior approval of the permitting authority.
 - c. The permittee is authorized to operate the storage, treatment or generating sites listed in the Facility Description section of this permit.
- 4. Sludge Received from other Facilities:
 - a. Permittees may accept domestic wastewater sludge from other facilities including septic tank pumpings from residential sources as long as the design sludge volume is not exceeded and the treatment facility performance is not impaired.
 - b. The permittee shall obtain a signed statement from the sludge generator or hauler that certifies the type and source of the sludge
- 5. These permit requirements do not supersede nor remove liability for compliance with county and other local ordinances.
- 6. These permit requirements do not supersede nor remove liability for compliance with other environmental regulations such as odor emissions under the Missouri Air Pollution Control Law and regulations.
- This permit may (after due process) be modified, or alternatively revoked and reissued, to comply with any applicable sludge disposal standard or limitation issued or approved under Section 405(d) of the Clean Water Actor under Chapter 644 RSMo.
- 8. In addition to STANDARD CONDITIONS, the Department may include sludge limitations in the special conditions portion or other sections of a site specific permit.
- 9. Alternate Limits in the Site Specific Permit.
 - Where deemed appropriate, the Department may require an individual site specific permit in order to authorize alternate limitations:
 - a. A site specific permit must be obtained for each operating location, including application sites.
 - b. To request a site specific permit, an individual permit application, permit fee, and supporting documents shall be submitted for each operating location. This shall include a detailed sludge/biosolids management plan or engineering report.
- 10. Exceptions to these Standard Conditions may be authorized on a case-by-case basis by the Department, as follows:
 - a. The Department will prepare a permit modification and follow permit notice provisions as applicable under 10 CSR 20-6.020, 40 CFR 124.10, and 40 CFR 501.15(a)(2)(ix)(E). This includes notification of the owner of the property located adjacent to each land application site, where appropriate.
 - b. Exceptions cannot be granted where prohibited by the federal sludge regulations under 40 CFR 503.

SECTION B – DEFINITIONS

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

SECTION C – MECHANICAL WASTEWATER TREATMENT FACILITIES

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

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

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

SECTION E - INCINERATION OF SLUDGE

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

SECTION F - SURFACE DISPOSAL SITES AND SLUDGE LAGOONS

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

SECTION G - LAND APPLICATION

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

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

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

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

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

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

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

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

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

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

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

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

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

TABLE 3							
D 11	CEC 15+		CEC	5 to 15	CEC 0 to 5		
Pollutant	Annual	Total ¹	Annual	Total ¹	Annual	Total ¹	
Arsenic	1.8	36.0	1.8	36.0	1.8	36.0	
Cadmium	1.7	35.0	0.9	9.0	0.4	4.5	
Copper	66.0	1,335.0	25.0	250.0	12.0	125.0	
Lead	13.0	267.0	13.0	267.0	13.0	133.0	
Mercury	0.7	15.0	0.7	15.0	0.7	15.0	
Nickel	19.0	347.0	19.0	250.0	12.0	125.0	
Selenium	4.5	89.0	4.5	44.0	1.6	16.0	
Zinc	124.0	2,492.0	50.0	500.0	25.0	250.0	

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

4

TABLE 4 -	Guidelines	for land	application	of other trac	e substances ¹

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

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

- ² This applies for a soil with a pH between 6.0 and 7.0 (salt based test) or a pH between 6.5 to 7.5 (water based test). Case-by-case review is required for higher pH soils.
- ³ Total Dioxin Toxicity Equivalents (TEQ) in soils, based on a risk assessment under 40 CFR 744, May 1998.
- ⁴ Case by case review. Concentrations in sludge should not exceed the 95th percentile of the National Sewage Sludge Survey, EPA, January 2009.

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

- a. Use best management practices when applying biosolids.
- b. Biosolids cannot discharge from the land application site
- c. Biosolid application is subject to the Missouri Department of Agriculture State Milk Board concerning grazing restrictions of lactating dairy cattle.
- d. Biosolid application must be in accordance with section 4 of the Endangered Species Act.
- e. Do not apply more than the agronomic rate of nitrogen needed.
- f. The applicator must document the Plant Available Nitrogen (PAN) loadings, available nitrogen in the soil, and crop removal when either of the following occurs: 1) When biosolids are greater than 50,000 mg/kg TN; or 2) When biosolids are land applied at an application rate greater than two dry tons per acre per year.
 - i. PAN can be determined as follows and is in accordance with WQ426
 - (Nitrate + nitrite nitrogen) + (organic nitrogen x 0.2) + (ammonia nitrogen x volatilization factor¹). ¹Volatilization factor is 0.7 for surface application and 1 for subsurface application.
- g. Buffer zones are as follows:
 - i. 300 feet of a water supply well, sinkhole, lake, pond, water supply reservoir or water supply intake in a stream;
 - 300 feet of a losing stream, no discharge stream, stream stretches designated for whole body contact recreation, wild and scenic rivers, Ozark National Scenic Riverways or outstanding state resource waters as listed in the Water Quality Standards, 10 CSR 20-7.031;
 - iii. 150 feet if dwellings;
 - iv. 100 feet of wetlands or permanent flowing streams;
 - v. 50 feet of a property line or other waters of the state, including intermittent flowing streams.
- h. Slope limitation for application sites are as follows;
 - i. A slope 0 to 6 percent has no rate limitation
 - ii. Applied to a slope 7 to 12 percent, the applicator may apply biosolids when soil conservation practices are used to meet the minimum erosion levels
 - Slopes > 12 percent, apply biosolids only when grass is vegetated and maintained with at least 80 percent ground cover at a rate of two dry tons per acre per year or less.
- i. No biosolids may be land applied in an area that it is reasonably certain that pollutants will be transported into waters of the state.
- j. Do not apply biosolids to sites with soil that is snow covered, frozen or saturated with liquid without prior approval by the Department.
- k. Biosolids / sludge applicators must keep detailed records up to five years.

SECTION H - CLOSURE REQUIREMENTS

- 1. This section applies to all wastewater facilities (mechanical, industrial, and lagoons) and sludge or biosolids storage and treatment facilities and incineration ash ponds. It does not apply to land application sites.
- 2. Permittees of a domestic wastewater facility who plan to cease operation must obtain Department approval of a closure plan which addresses proper removal and disposal of all residues, including sludge, biosolids. Mechanical plants, sludge lagoons, ash ponds and other storage structures must obtain approval of a closure plan from the Department. Permittee must maintain this permit until the facility is closed in accordance with the approved closure plan per 10 CSR 20 6.010 and 10 CSR 20 6.015.
- 3. Residuals that are left in place during closure of a lagoon or earthen structure or ash pond shall not exceed the agricultural loading rates as follows:
 - a. Residuals shall meet the monitoring and land application limits for agricultural rates as referenced in Section H of these standard conditions.
 - b. If a wastewater treatment lagoon has been in operation for 15 years or more without sludge removal, the sludge in the lagoon qualifies as a Class B biosolids with respect to pathogens due to anaerobic digestion, and testing for fecal coliform is not required. For other lagoons, testing for fecal coliform is required to show compliance with Class B biosolids limitations. In order to reach Class B biosolids requirements, fecal coliform must be less than 2,000,000 colony forming units or 2,000,000 most probable number. All fecal samples must be presented as geometric mean per gram.
 - c. The allowable nitrogen loading that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. For a grass cover crop, the allowable PAN is 300 pounds/acre.
 - i. PAN can be determined as follows:
 - (Nitrate + nitrite nitrogen) + (organic nitrogen x 0.2) + (ammonia nitrogen x volatilization factor¹). ¹Volatilization factor is 0.7 for surface application and 1 for subsurface application.
- 4. When closing a domestic wastewater treatment lagoon with a design treatment capacity equal or less than 150 persons, the residuals are considered "septage" under the similar treatment works definition. See Section B of these standard conditions. Under the septage category, residuals may be left in place as follows:
 - a. Testing for metals or fecal coliform is not required
 - b. If the wastewater treatment lagoon has been in use for less than 15 years, mix lime with the sludge at a rate of 50 pounds of hydrated lime per 1000 gallons (134 cubic feet) of sludge.
 - c. The amount of sludge that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. 100 dry tons/acre of sludge may be left in the basin without testing for nitrogen. If 100 dry tons/acre or more will be left in the lagoon, test for nitrogen and determine the PAN using the calculation above. Allowable PAN loading is 300 pounds/acre.
- 5. Residuals left within the domestic lagoon shall be mixed with soil on at least a 1 to 1 ratio, the lagoon berm shall be demolished, and the site shall be graded and contain ≥70% vegetative density over 100% of the site so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion.
- 6. Lagoons and/or earthen structure and/or ash pond closure activities shall obtain a storm water permit for land disturbance activities that equal or exceed one acre in accordance with 10 CSR 20-6.200
- When closing a mechanical wastewater and/or industrial process wastewater plant; all sludge must be cleaned out and disposed of in accordance with the Department approved closure plan before the permit for the facility can be terminated.
 - a. Land must be stabilized which includes any grading, alternate use or fate upon approval by the Department, remediation, or other work that exposes sediment to stormwater per 10 CSR 20-6.200. The site shall be graded and contain ≥70% vegetative density over 100% of the site, so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion.
 - Per 10 CSR 20-6.015(4)(B)6, Hazardous Waste shall not be land applied or disposed during industrial and mechanical plant closures unless in accordance with Missouri Hazardous Waste Management Law and Regulations under 10 CSR 25.
 - c. After demolition of the mechanical plant / industrial plant, the site must only contain clean fill defined in RSMo 260.200 (5) as uncontaminated soil, rock, sand, gravel, concrete, asphaltic concrete, cinderblocks, brick, minimal amounts of wood and metal, and inert solids as approved by rule or policy of the Department for fill or other beneficial use. Other solid wastes must be removed.
- 8. If sludge from the domestic lagoon or mechanical treatment plant exceeds agricultural rates under Section G and/or H, a landfill permit or solid waste disposal permit must be obtained if the permittee chooses to seek authorization for on-site sludge disposal under the Missouri Solid Waste Management Law and regulations per 10 CSR 80, and the permittee must comply with the surface disposal requirements under 40 CFR 503, Subpart C.

SECTION I – MONITORING FREQUENCY

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

I ADLE J								
Design Sludge Production (dry tons per year)	Monitoring Frequency (See Notes 1, 2, and 3)							
	Metals, Pathogens and Vectors	Nitrogen TKN ¹	Nitrogen PAN ²	Priority Pollutants and TCLP ³				
0 to 100	1 per year	1 per year	1 per month	1 per year				
101 to 200	biannual	biannual	1 per month	1 per year				
201 to 1,000	quarterly	quarterly	1 per month	1 per year				
1,001 to 10,000	1 per month	1 per month	1 per week	4				
10,001 +	1 per week	1 per week	1 per day	4				
T	1.1	11	1					

TABLE	5

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

² Calculate plant available nitrogen (PAN) when either of the following occurs: 1) when biosolids are greater than 50,000 mg/kg TN; or 2) when biosolids are land applied at an application rate greater than two dry tons per acre per year.

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

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

Note 1: Total solids: A grab sample of sludge shall be tested one per day during land application periods for percent total solids. This data shall be used to calculate the dry tons of sludge applied per acre. Note 2: Total Phosphorus: Total phosphorus and total potassium shall be tested at the same monitoring frequency as metals. Note 3: Table 5 is not applicable for incineration and permit holders that landfill their sludge.

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

SECTION J - RECORD KEEPING AND REPORTING REQUIREMENTS

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

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

DNR regional office listed in your permit (see cover letter of permit) ATTN: Sludge Coordinator EPA Region VII Water Compliance Branch (WACM)

Water Compliance Branch (WACM Sludge Coordinator 11201 Renner Blvd. Lenexa, KS 66219

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

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

- g. Land Application Sites:
 - i. Report the location of each application site, the annual and cumulative dry tons/acre for each site, and the landowners name and address. The location for each spreading site shall be given as a legal description for nearest ¹/₄, ¹/₄, Section, Township, Range, and county, or UTM coordinates. The facility shall report PAN when either of the following occurs: 1) When biosolids are greater than 50,000 mg/kg TN; or 2) when biosolids are land applied at an application rate greater than two dry tons per acre per year.
 - ii. If the "Low Metals" criteria are exceeded, report the annual and cumulative pollutant loading rates in pounds per acre for each applicable pollutant, and report the percent of cumulative pollutant loading which has been reached at each site.
 - iii. Report the method used for compliance with pathogen and vector attraction requirements.
 - iv. Report soil test results for pH, CEC, and phosphorus. If none was tested during the year, report the last date when tested and results.

			FOR AGENCY USE ONLY				
				APPLICATION ID NUM	TION ID NUMBER DATE RECEIVED		
FOR YOUR MIS	SOURI ST	ATE OPERAT	TING PERMIT	CHECK NUMBER / JE	TPAY CONF	IRMATION NUMBER	
READ THE ACCOMPANYING IN	STRUCTION	S BEFORE COM	PLETING THIS FORM				
1. THIS APPLICATION IS FOR:							
Owner change of name or add	ress						
Continuing Authority change of	f name or ad	dress					
Facility change of name or add	Iress						
1.1 Is the appropriate fee include Permit fees may be payed online band make an online payment. http://www.communication.com/	d with the ap by credit card s://magic.col	plication? or eCheck throug lectorsolutions.co	Yes No gh a system called JetPay om/magic-ui/payments/mo	/. Use the URL p -natural-resource	provided es/596/	to access JetPay	
2. PERMIT							
PERMIT NUMBER			COUNTY				
			Henry				
ANTICIPATED DATE OF NAME OR ADDRESS CH	ANGE						
10/01/2019							
PREVIOUS INFORMATION FOR	OWNER		REVISED INFORMATI	ON FOR OWNE	R		
OWNER NAME	onnen		OWNER NAME				
Kansas City Power & Light Compa	any		Evergy, INC.				
PO Box 418679			PO Box 418679				
сттү Kansas Citv	STATE MO	ZIP CODE 64141	сіту Kansas City		STATE MO	ZIP CODE 64141	
TELEPHONE NUMBER WITH AREA CODE	1		TELEPHONE NUMBER WITH AREA CODE				
PREVIOUS INFORMATION FOR	CONTINUIN	GAUTHORITY	REVISED INFORMATI	ON FOR CONT	NUING	AUTHORITY	
CONTINUING AUTHORITY NAME Kansas City Power & Light Compa	any		CONTINUING AUTHORITY NAME Evergy, INC.				
ADDRESS (MAILING)			ADDRESS (MAILING) PO Box 418679				
CITY	STATE	ZIP CODE	CITY		STATE	ZIP CODE	
	MO	64141	Kansas City		MO	64141	
(816) 556-2200			(816) 556-2200				
PREVIOUS INFORMATION FOR	FACILITY		REVISED INFORMATI	ON FOR FACIL	ITY	1. 1. 6. 1. 1.	
FACILITY NAME Montrose Generating Station			FACILITY NAME Montrose Generating S	Station			
ADDRESS (PHYSICAL LOCATION)			ADDRESS (PHYSICAL LOCATION)				
400 SW Highway P	STATE	ZIP CODE	400 SW Highway P		STATE	ZIP CODE	
Clinton	MO	64735	Clinton		MO	64735	
TELEPHONE NUMBER WITH AREA CODE (816) 556-2200			(816) 556-2200	EA CODE			
5. FACILITY CONTACT			La la seconda de la second	5.2.1.1.1			
NAME Jared Morrison			TITLE Senior Manager of Env	vironmental Serv	ices		
EMAIL Liprod morrison@quartu.com			TELEPHONE NUMBER WITH ARE	EA CODE			
Jarea.morrison@evergy.com ADDRESS			(/00) 0/0-02/3 CITY	STATE ZIP COI		ZIP CODE	
818 South Kansas Ave	Topeka	KS		66612			
I certify under penalty of law that this do designed to assure that qualified person manage the system, or those persons of belief, true, accurate and complete. I a imprisonment for knowing violations.	ocument and a nnel properly g lirectly respon- m aware that t	Il attachments were ather and evaluate sible for gathering t here are significant	e prepared under my direction the information submitted. E he information, the information penalties for submitting false	n or supervision in Based on my inqui on submitted is, to e information, inclu	accordan ry of the p the best o iding the p	ice with a system person or persons who of my knowledge and possibility of fine and	
NAME (TYPE OR PRINT)	~		OFFICIAL TITLE	rketina (785)	ONE NUMBE	R WITH AREA CODE	
SIGNATURE		/		DATE SIGNED			
MO 780-2697 (02-19)	$\langle \neg \rangle$	1		10/	31/201	19	