

KPDES



**KENTUCKY POLLUTANT  
DISCHARGE ELIMINATION  
SYSTEM**

**PERMIT**

**AUTHORIZATION TO DISCHARGE UNDER THE  
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**PERMIT NO.:** KY0003221

**AGENCY INTEREST NO.:** 2122

**Pursuant to Authority in KRS 224,**

Louisville Gas & Electric Co  
PO Box 32010  
Louisville, KY 40232

**is authorized to discharge from a facility located at**

Mill Creek Generating Station  
14660 Dixie Hwy  
Louisville, Jefferson County, Kentucky

**to receiving waters named**

Ohio River, Mill Creek, Unnamed Tributary of Pond Creek, and Unnamed Tributary of Ohio River

**in accordance with effluent limitations, monitoring requirements and other conditions set forth in this permit.**

This permit shall become effective on July 1, 2018

This modification shall become effective on November 1, 2021.

This permit and the authorization to discharge shall expire at midnight, June 30, 2023.

Date Signed: October 8, 2021

**Carey M. Johnson, Director  
Division of Water**

**THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS:**

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# **SECTION 1**

## **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

## 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

### 1.1. Compliance Monitoring Locations (Outfalls)

The following table lists the outfalls authorized by this permit, the location and description of each, and the DOW assigned KPDES outfall number:

TABLE 1.					
Outfall No.	Outfall Type	Latitude (N)	Longitude (W)	Receiving Water	Description of Outfall
001	External	38.05139°	85.91278°	Ohio River	Combined flows of Unit 1 once-through/condenser cooling water, Process Water Pond discharge (002), stormwater runoff from area 1, and Unit 2 cooling tower blowdown (003). Process Water Pond and Unit 2 cooling tower blowdown will be redirected to Outfall 025 once it is constructed.
002	Internal	38.05778°	85.91083°	Outfall 001 / 025	Process Water Pond overflow which will consist of treated FGD wastewaters (all process and solids dewatering flows) from Units 1 – 4, Units 1 – 4 sumps, landfill stormwater runoff and leachate, boiler chemical metal cleaning wastes (006), water treatment wastewaters, Units 1 – 4 boiler blowdown and quench waters, natural gas system wastewaters, and stormwater runoff from Area 2.
002A	External	38.05778°	85.91083°	Ohio River	Process Water Pond overflow which will consist of treated FGD wastewaters (all process and solids dewatering flows) from Units 1 – 4, Units 1 – 4 sumps, landfill stormwater runoff and leachate, boiler chemical metal cleaning wastes (006), water treatment wastewaters, Units 1 – 4 boiler blowdown and quench waters, natural gas system wastewaters, stormwater runoff from Area 2.
003	Internal	38.05556°	85.91139°	Outfall 001 / 025	Unit 2 cooling tower blowdown
004	Internal	38.04944°	85.91306°	Outfall 023	Unit 3 cooling tower blowdown
005	Internal	38.04944°	85.91306°	Outfall 023	Unit 4 cooling tower blowdown
006	Internal	38.05639°	85.90972°	Outfall 002	Boiler chemical metal cleaning wastes
007	External	38.05278°	85.91250°	Ohio River	Stormwater runoff from Area 7L (Below Powerhouse West side)
009	Internal	38.05306°	85.90500°	N/A	Plant Intake
010	External	38.06278°	85.90500°	Mill Creek	Stormwater runoff from Area 10B (North entrance and maintenance areas).
011	External	38.04583°	85.90028°	UT of Pond Creek	Stormwater runoff from Areas 11C, R (East entrance, parking, and future landfill).

TABLE 1.

Outfall No.	Outfall Type	Latitude (N)	Longitude (W)	Receiving Water	Description of Outfall
012	Internal	38.04778°	85.91250°	Outfall 023	Stormwater from Areas 12 a through f, and non-process wastewaters: Clearwell Surplus Cooling/Service waters, Equipment- truck loadout miscellaneous washdown, Unit 3 and/or Unit 4 cooling tower blowdown.
013	External	38.04194°	85.91250°	Ohio River	Stormwater runoff from Area 13 (Active Landfill A).
014	External	38.05389°	85.91222°	Ohio River	Stormwater runoff from Area 14 (Switchyard- Powerhouse northwest side).
015	External	38.06472°	85.91028°	Ohio River	Stormwater runoff from Area 15 (Ash Pond northwest external slopes and northwestern 0.7 acres of closed-capped Ash Pond areas).
016	External	38.04972°	85.90444°	UT of Ohio River	Stormwater runoff from Area 16 (Closed Landfill B).
017	External	38.06194°	85.91083°	Ohio River	Stormwater runoff from Area 17 (Ash Pond west external slopes).
018	External	38.05944°	85.91111°	Ohio River	Stormwater runoff from Area 18 (Ash Pond southwest external slopes).
019	External	38.05583°	85081167°	Ohio River	Stormwater runoff Area 19 (Riverbank slopes west of Unit 2 cooling tower).
020	External	38.04944°	85.91250°	Ohio River	Stormwater runoff from Area 20 (Riverbank slopes west of Unit 4 cooling tower).
021	External	38.04778°	85.91278°	Ohio River	Stormwater runoff from Area 21 (Riverbank slopes west of Unit 3 cooling tower).
022	External	38.04639°	85.91278°	Ohio River	Stormwater runoff from Area 22 (Yard area southwest of Unit 3 cooling tower).
023	External	38.04750°	85.91361°	Ohio River	Unit 3 and Unit 4 cooling tower blowdowns, Stormwater from Areas 12 a through f, FGD/Gypsum Dewatering Filtrate and U-Flow Flush process waters, and non-process wastewaters: Clearwell Surplus Cooling/Service waters, Equipment- truck loadout miscellaneous washdown.
024	Internal	38.04778°	85.90917°	Outfall 002	Treated FGD wastewaters (all process and solids dewatering flows) from Units 1 – 4.
025	External	38.05515°	85.91321°	Ohio River	Process Waters Pond Discharge (Outfall 002) Unit 2 Cooling Tower Blowdown (Outfall 003) Stormwater Runoff (Non -Contaminated).

## 1.2. Effluent Limitations and Monitoring Requirements

Outfall 001 will undergo operational changes as the facility transitions from existing conditions with the construction on a new multiport diffuser. To capture the transition, effluent limitations tables have been developed for three phases. Please note that the permittee shall notify the Division of Water, Surface Water Permits Branch at least 30 notice of the required change.

### 1.2.1. Outfall 001

Beginning with the effective date of this permit Modification and lasting through the term of this permit or unit the flows from Outfall 002 and 003 have been redirected new outfall 025, discharges from Outfall 001 shall comply with the following effluent limitations:

TABLE 2.									
EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Day	Calculated
Temperature	° F	N/A	N/A	N/A	Report	110	N/A	1/Day	Log
Free Available Chlorine	mg/l	N/A	N/A	N/A	0.2	0.5	N/A	Per Occurrence <sup>1</sup>	Multiple Grab <sup>2</sup>
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019	N/A	Per Occurrence <sup>1</sup>	Multiple Grab <sup>2</sup>
Total Residual Oxidants	mg/l	N/A	N/A	N/A	Report	0.20	N/A	Per Occurrence <sup>1</sup>	Multiple Grab <sup>2</sup>
Time of Oxidant Addition	minutes/unit/day	N/A	N/A	N/A	N/A	120	N/A	Per Occurrence <sup>1</sup>	Log
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Week	Grab
Chronic WET <sup>3</sup>	TU <sub>c</sub>	N/A	N/A	N/A	N/A	N/A	11.84	1/Quarter	( <sup>4</sup> )
Total Recoverable Iron <sup>5</sup>	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Grab
Total Recoverable Mercury <sup>5</sup>	mg/l	N/A	N/A	N/A	0.000051	0.0014	N/A	1/Month	Grab
Total Recoverable Selenium <sup>5</sup>	mg/l	N/A	N/A	N/A	0.056	Report	N/A	1/Month	Grab
Total Recoverable Selenium <sup>5</sup> (Fish Tissue)	mg/kg dry weight	N/A	N/A	N/A	N/A	N/A	8.6	( <sup>6</sup> )	( <sup>6</sup> )
<sup>1</sup> Per Occurrence means during periods of chlorination or oxidant addition, but no more frequent than once per week.									
<sup>2</sup> Multiple grab means grab samples collected at the approximate beginning of oxidant discharge and once every fifteen (15) minutes thereafter until the end of oxidant discharge.									
<sup>3</sup> WET – Whole Effluent Toxicity									
<sup>4</sup> Three (3) 24-hour composite samples with one each collected every other day for a period of five (5) days, i.e. days 1, 3, & 5.									

TABLE 2.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Daily Maximum	Maximum		

<sup>5</sup>Limitations and Monitoring requirements for these pollutants only apply when Unit 1 once-through cooling waters are not discharged through Outfall 001.

<sup>6</sup>Should the monthly average concentration of Total Recoverable Selenium exceed 56 µg/l, see Section 5.13 for additional requirements.

Not more than one unit may discharge free available or total residual chlorine at any one time.

The term Total Residual Oxidants means the value obtained using the amperometric titration or DPD methods for Total Residual Chlorine described in 40 CFR Part 136. In the event the permittee needs to use an oxidant other than chlorine, the permittee shall request approval prior to the initial use of the oxidant from the Division of Water.

Upon the redirection of Outfalls 002 and 003 to the new Outfall 025, and lasting through the term of this permit, discharges from Outfall 001 shall comply with the following effluent limitations:

TABLE 3.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Day	Calculated
Temperature	° F	N/A	N/A	N/A	Report	110	N/A	1/Day	Log
Free Available Chlorine	mg/l	N/A	N/A	N/A	0.2	0.5	N/A	Per Occurrence <sup>1</sup>	Multiple Grab <sup>2</sup>
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019	N/A	Per Occurrence <sup>1</sup>	Multiple Grab <sup>2</sup>
Total Residual Oxidants	mg/l	N/A	N/A	N/A	Report	0.20	N/A	Per Occurrence <sup>1</sup>	Multiple Grab <sup>2</sup>
Time of Oxidant Addition	minutes/unit/day	N/A	N/A	N/A	N/A	120	N/A	Per Occurrence <sup>1</sup>	Log
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Week	Grab

<sup>1</sup>Per Occurrence means during periods of chlorination or oxidant addition, but no more frequent than once per week.

<sup>2</sup>Multiple grab means grab samples collected at the approximate beginning of oxidant discharge and once every fifteen (15) minutes thereafter until the end of oxidant discharge.

Not more than one unit may discharge free available or total residual chlorine at any one time.

The term Total Residual Oxidants means the value obtained using the amperometric titration or DPD methods for Total Residual Chlorine described in 40 CFR Part 136. In the event the permittee needs to use an oxidant other than chlorine, the permittee shall request approval prior to the initial use of the oxidant from the Division of Water.



**1.2.2. Outfall 002**

Beginning with the effective date of this permit Modification and lasting through the term of this permit, discharges from Outfall 002 shall comply with the following effluent limitations:

TABLE 4.									
EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Day	Instantaneous
Total Suspended Solids	mg/l	N/A	N/A	N/A	30.0	97.9	N/A	2/Month	Grab
Oil & Grease	mg/l	N/A	N/A	N/A	14.5	19.3	N/A	2/Month	Grab
There shall be no discharge of pollutants in fly ash transport water generated on and after October 31, 2019.									
There shall be no discharge of pollutants in bottom ash transport water generated on and after November 1, 2020.									

**1.2.3. Outfall 002A**

Beginning with the effective date of this permit Modification and lasting through the term of this permit, discharges from Outfall 002A shall comply with the following effluent limitations:

TABLE 5.									
EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Day	Instantaneous
Total Suspended Solids	mg/l	N/A	N/A	N/A	30.0	97.9	N/A	2/Month	Grab
Oil & Grease	mg/l	N/A	N/A	N/A	14.5	19.3	N/A	2/Month	Grab
pH <sup>1</sup>	SU	N/A	N/A	6.0	N/A	N/A	9.0	2/Month	Grab
Total Recoverable Iron	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Grab
Total Recoverable Mercury	mg/l	N/A	N/A	N/A	0.000051	0.0014	N/A	1/Month	Grab
Total Recoverable Selenium	mg/l	N/A	N/A	N/A	0.056	Report	N/A	1/Month	Grab
Total Recoverable Selenium (Fish Tissue)	mg/kg dry weight	N/A	N/A	N/A	N/A	N/A	8.6	( <sup>1</sup> )	( <sup>1</sup> )

TABLE 5.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Acute WET <sup>2</sup>	TU <sub>A</sub>	N/A	N/A	N/A	N/A	N/A	1.00	1/Quarter	( <sup>3</sup> )
<sup>1</sup> Should the monthly average concentration of Total Recoverable Selenium exceed 56 µg/l, see Section 5.13 for additional requirements.									
<sup>2</sup> WET – Whole Effluent Toxicity									
<sup>3</sup> Two (2) discrete grab samples.									
There shall be no discharge of pollutants in fly ash transport water generated on and after October 31, 2019.									
There shall be no discharge of pollutants in bottom ash transport water generated on and after November 1, 2020.									

**1.2.4. Outfall 003**

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 003 shall comply with the following effluent limitations:

TABLE 6.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Month	Calculated
Free Available Chlorine	mg/l	N/A	N/A	N/A	0.2	0.5	N/A	Per Occurrence <sup>1</sup>	Multiple Grab <sup>2</sup>
Total Residual Chlorine	mg/l	N/A	N/A	N/A	Report	0.2	N/A	Per Occurrence <sup>1</sup>	Multiple Grab <sup>2</sup>
Total Residual Oxidants <sup>3</sup>	mg/l	N/A	N/A	N/A	Report	0.2	N/A	Per Occurrence <sup>1</sup>	Multiple Grab <sup>2</sup>
Time of Oxidant Addition	minutes/unit/day	N/A	N/A	N/A	N/A	120	N/A	Per Occurrence <sup>1</sup>	Log
Total Recoverable Chromium	mg/l	N/A	N/A	N/A	0.2	0.2	N/A	1/Year	Grab
Total Recoverable Zinc	mg/l	N/A	N/A	N/A	1.0	1.0	N/A	1/Year	Grab
Priority Pollutants <sup>4</sup>	mg/l	N/A	N/A	N/A	N/A	NDA <sup>5</sup>	N/A	1/Year	Calculated
<sup>1</sup> Per Occurrence means during periods of chlorination or oxidant addition, but no more frequent than once per week.									
<sup>2</sup> Multiple grab means grab samples collected at the approximate beginning of oxidant discharge and once every fifteen (15) minutes thereafter until the end of oxidant discharge.									

TABLE 6.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Daily Maximum	Maximum		
<sup>3</sup> The term Total Residual Oxidants means the value obtained using the amperometric titration or DPD methods for Total Residual Chlorine described in 40 CFR Part 136. In the event the permittee needs to use an oxidant other than chlorine, the permittee shall request approval prior to the initial use of the oxidant from the Division of Water.									
<sup>4</sup> Priority pollutants shall be monitored once per year by grab sample or by engineering calculations. The results of the analyses/engineering calculations shall show the results for each pollutant and be attached to the DMR. The term priority pollutant means the pollutants (40 CFR 423 Appendix A) which are contained in chemicals added for cooling tower maintenance, except Total Recoverable Chromium and Total Recoverable Zinc.									
<sup>5</sup> The abbreviation NDA means No Detectable Amount.									
Not more than one unit may discharge free available or total residual chlorine at any one time.									

**1.2.5. Outfall 004**

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 004 shall comply with the following effluent limitations:

TABLE 7.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Week	Calculated
Priority Pollutants <sup>1</sup>	mg/l	N/A	N/A	N/A	N/A	NDA <sup>2</sup>	N/A	1/Year	Calculated
Free Available Chlorine	mg/l	N/A	N/A	N/A	0.2	0.5	N/A	Per Occurrence <sup>3</sup>	Multiple Grab <sup>4</sup>
Total Residual Chlorine	mg/l	N/A	N/A	N/A	Report	0.20	N/A	Per Occurrence <sup>3</sup>	Multiple Grab <sup>4</sup>
Total Residual Oxidants	mg/l	N/A	N/A	N/A	Report	0.20	N/A	Per Occurrence <sup>3</sup>	Multiple Grab <sup>4</sup>
Time of Oxidant Addition	minutes/unit/day	N/A	N/A	N/A	N/A	120	N/A	Per Occurrence <sup>3</sup>	Log
<sup>1</sup> Priority pollutants shall be monitored once per year by grab sample or by engineering calculations. The results of the analyses/engineering calculations shall show the results for each pollutant and be attached to the DMR. The term priority pollutant means the pollutants (40 CFR 423 Appendix A) which are contained in chemicals added for cooling tower maintenance, except Total Recoverable Chromium and Total Recoverable Zinc.									
<sup>2</sup> The abbreviation NDA means No Detectable Amount.									

TABLE 7.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Daily Maximum	Maximum		
<sup>3</sup> Per Occurrence means during periods of chlorination or oxidant addition, but no more frequent than once per week.									
<sup>4</sup> Multiple grab means grab samples collected at the approximate beginning of oxidant discharge and once every fifteen (15) minutes thereafter until the end of oxidant discharge.									
The term Total Residual Oxidants means the value obtained using the amperometric titration or DPD methods for Total Residual Chlorine described in 40 CFR Part 136. In the event the permittee needs to use an oxidant other than chlorine, the permittee shall request approval prior to the initial use of the oxidant from the Division of Water.									
Not more than one unit may discharge free available or total residual chlorine at any one time.									

**1.2.6. Outfall 005**

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 005 shall comply with the following effluent limitations:

TABLE 8.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Week	Calculated
Priority Pollutants <sup>1</sup>	mg/l	N/A	N/A	N/A	N/A	NDA <sup>2</sup>	N/A	1/Year	Calculated
Free Available Chlorine	mg/l	N/A	N/A	N/A	0.2	0.5	N/A	Per Occurrence <sup>3</sup>	Multiple Grab <sup>4</sup>
Total Residual Chlorine	mg/l	N/A	N/A	N/A	Report	0.20	N/A	Per Occurrence <sup>3</sup>	Multiple Grab <sup>4</sup>
Total Residual Oxidants	mg/l	N/A	N/A	N/A	Report	0.20	N/A	Per Occurrence <sup>3</sup>	Multiple Grab <sup>4</sup>
Time of Oxidant Addition	minutes/unit/day	N/A	N/A	N/A	N/A	120	N/A	Per Occurrence <sup>3</sup>	Log
<sup>1</sup> Priority pollutants shall be monitored once per year by grab sample or by engineering calculations. The results of the analyses/engineering calculations shall show the results for each pollutant and be attached to the DMR. The term priority pollutant means the pollutants (40 CFR 423 Appendix A) which are contained in chemicals added for cooling tower maintenance, except Total Recoverable Chromium and Total Recoverable Zinc.									
<sup>2</sup> The abbreviation NDA means No Detectable Amount.									
<sup>3</sup> Per Occurrence means during periods of chlorination or oxidant addition, but no more frequent than once per week.									

TABLE 8.									
EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Daily Maximum	Maximum		
<sup>4</sup> Multiple grab means grab samples collected at the approximate beginning of oxidant discharge and once every fifteen (15) minutes thereafter until the end of oxidant discharge.									
The term Total Residual Oxidants means the value obtained using the amperometric titration or DPD methods for Total Residual Chlorine described in 40 CFR Part 136. In the event the permittee needs to use an oxidant other than chlorine, the permittee shall request approval prior to the initial use of the oxidant from the Division of Water.									
Not more than one unit may discharge free available or total residual chlorine at any one time.									

**1.2.7. Outfall 006**

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 006 shall comply with the following effluent limitations:

TABLE 9.									
EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Batch <sup>1</sup>	Calculated
Total Copper	mg/l	N/A	N/A	N/A	1.0	1.0	N/A	1/Batch <sup>1</sup>	Grab
Total Iron	mg/l	N/A	N/A	N/A	1.0	1.0	N/A	1/Batch <sup>1</sup>	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Batch <sup>1</sup>	Grab

<sup>1</sup>Monitoring shall be conducted once per metal cleaning operation.

**1.2.8. Outfalls 007, 010, 011, 014, 016, 017, 018, 019, 020, 021, and 022**

Beginning on the effective date and lasting through the term of this permit, discharges from Outfalls 007, 010, 011, 014, 016, 017, 018, 019, 020, 021, and 022 shall comply with the following effluent limitations:

TABLE 10.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Due to the absence of any industrial processes, equipment or storage areas being located within the areas served by these outfalls, the DOW has determined that implementation of BMPs would be the most effective approach for controlling pollutants from these areas. The BMP Plan shall specifically mention controls and practices used to control or abate the discharge of pollutants in stormwater discharges from these outfalls.									

**1.2.9. Outfall 009**

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 009 shall comply with the following effluent limitations:

TABLE 11.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Week	Instantaneous
Temperature	° F	N/A	N/A	N/A	Report	Report	N/A	1/Week	Grab
Total Recoverable Metals	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
The effluent characteristic Total Recoverable Metals means Total Recoverable: Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Selenium, Silver, Thallium, and Zinc.									

**1.2.10. Outfall 012**

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 012 shall comply with the following effluent limitations:

TABLE 12.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Month	Instantaneous
Total Suspended Solids	mg/l	N/A	N/A	N/A	30.0	67.3	N/A	1/Month	Grab

TABLE 12.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Oil & Grease	mg/l	N/A	N/A	N/A	9.1	12.3	N/A	1/Month	Grab

**1.2.11. Outfall 013**

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 013 shall comply with the following effluent limitations:

TABLE 13.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	60	N/A	1/Quarter	Grab
Oil & Grease	mg/l	N/A	N/A	N/A	10	15	N/A	1/Quarter	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab

**1.2.12. Outfall 015**

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 015 shall comply with the following effluent limitations:

TABLE 14.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous
Total Suspended Solids	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Hardness (as mg/l CaCO <sub>3</sub> )	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
pH	SU	N/A	N/A	Report	N/A	N/A	Report	1/Quarter	Grab
Total Recoverable Arsenic	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab

TABLE 14.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Total Recoverable Cadmium	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Chromium	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Copper	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Lead	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Mercury	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Nickel	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Silver	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Zinc	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab

**1.2.13. Outfall 023**

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 023 shall comply with the following effluent limitations:

TABLE 15.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Week	Calculated
Temperature	°F	N/A	N/A	N/A	Report	115	N/A	1/Week	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Week	Grab
Total Recoverable Iron	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Grab
Total Recoverable Copper	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Grab
Hardness (as mg/l CaCO <sub>3</sub> )	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Grab
Total Recoverable Chromium	mg/l	N/A	N/A	N/A	0.2	0.2	N/A	1/Year	Grab
Total Recoverable Zinc	mg/l	N/A	N/A	N/A	1.0	1.0	N/A	1/Year	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Year	Grab
Total Recoverable Mercury	mg/l	N/A	N/A	N/A	0.000051	0.0014	N/A	1/Month	Grab



TABLE 15.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Total Recoverable Selenium	mg/l	N/A	N/A	N/A	24.0	Report	N/A	1/Quarter	Grab
Total Recoverable Selenium (Fish Tissue)	mg/kg dry weight	N/A	N/A	N/A	N/A	N/A	8.6	( <sup>1</sup> )	( <sup>1</sup> )
Acute Toxicity <sup>2</sup>	TU <sub>A</sub>	N/A	N/A	N/A	N/A	8.00	N/A	1/Quarter	( <sup>3</sup> )

<sup>1</sup>Should the monthly average concentration of Total Recoverable Selenium exceed 24.0 mg/l, see Section 5.13 for additional requirements.

<sup>2</sup>WET – Whole Effluent Toxicity

<sup>3</sup>Two (2) discrete grab samples shall be collected 12 hours apart.

**1.2.14. Outfall 024**

Beginning on January 1, 2025 and lasting through the term of this permit discharges from Outfall 024 shall comply with the following effluent limitations:

TABLE 16.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Month	Calculated
Total Recoverable Arsenic	µg/l	N/A	N/A	N/A	8	18	N/A	1/Month	Grab
Total Recoverable Mercury	ng/l	N/A	N/A	N/A	34	103	N/A	1/Month	Grab
Total Recoverable Selenium	µg/l	N/A	N/A	N/A	29	70	N/A	1/Month	Grab
Nitrate/nitrite as N	mg/l	N/A	N/A	N/A	3	4	N/A	1/Month	Grab

**1.2.15. Outfall 025**

The permittee shall notify the Division of Water, Surface Water Permits Branch at least 30 days prior to completion of the high-rate multiport diffuser and installation of the outfall structure. Once the diffuser is complete and lasting through the term of this permit, discharges from Outfall 025 shall comply with the following effluent limitations:

TABLE 17.

EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	2/Month	Calculated
Temperature	°F	N/A	N/A	N/A	Report	110	N/A	2/Month	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	2/Month	Grab
Hardness (as mg/l CaCO <sub>3</sub> )	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Copper	mg/l	N/A	N/A	N/A	0.315	0.315	N/A	1/Quarter	Grab
Total Recoverable Iron	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Mercury	mg/l	N/A	N/A	N/A	0.000051	0.0014	N/A	1/Quarter	Grab
Total Recoverable Selenium	mg/l	N/A	N/A	N/A	0.628	Report	N/A	1/Quarter	Grab
Total Recoverable Selenium (Fish Tissue)	mg/kg dry weight	N/A	N/A	N/A	N/A	N/A	8.6	( <sup>1</sup> )	( <sup>1</sup> )
Acute Toxicity <sup>2</sup>	TU <sub>A</sub>	N/A	N/A	N/A	N/A	8.61	N/A	1/Quarter	( <sup>3</sup> )

<sup>1</sup>Should the monthly average concentration of Total Recoverable Selenium exceed 0.628 mg/l, see Section 5.13 of the permit for additional requirements.

<sup>2</sup>WET – Whole Effluent Toxicity

<sup>3</sup>Two (2) discrete grab samples shall be collected 12 hours apart.

### 1.3. Standard Effluent Requirements

The discharges to Waters of the Commonwealth shall not produce floating solids, visible foam or a visible sheen on the surface of the receiving waters.

# **SECTION 2**

## **STANDARD CONDITIONS**

## **2. STANDARD CONDITIONS**

The following conditions apply to all KPDES permits.

### **2.1. Duty to Comply**

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of KRS Chapter 224 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Any person who violates applicable statutes or who fails to perform any duty imposed, or who violates any determination, permit, administrative regulation, or order of the cabinet promulgated pursuant thereto shall be liable for a civil penalty as provided at KRS 224.99.010.

### **2.2. Duty to Reapply**

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit.

### **2.3. 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.

### **2.4. 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.

### **2.5. 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.

### **2.6. Permit Actions**

This permit may be modified, revoked and reissued, or terminated for cause. 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.

### **2.7. Property Rights**

This permit does not convey any property rights of any sort, or any exclusive privilege.

### **2.8. Duty to Provide Information**

The permittee shall furnish to the Director, within a reasonable time, any information which the Director 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 Director upon request, copies of records required to be kept by this permit.

## 2.9. Inspection and Entry

The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- (1) 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 this permit;
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

## 2.10. Monitoring and Records

- (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (2) Except for records of monitoring information required by this 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 401 KAR 5:065, Section 2(10) [40 CFR 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 this permit, and records of all data used to complete the application for this 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 Director at any time.
- (3) Records of monitoring information shall include:
  - a) The date, exact place, and time of sampling or measurements;
  - b) The individual(s) who performed the sampling or measurements;
  - c) The date(s) analyses were performed;
  - d) The individual(s) who performed the analyses;
  - e) The analytical techniques or methods used; and
  - f) The results of such analyses.
- (4) Monitoring must be conducted according to test procedures approved under 401 KAR 5:065, Section 2(8) [40 CFR 136] unless another method is required under 401 KAR 5:065, Section 2(9) or (10) [40 CFR subchapters N or O].
- (5) KRS 224.99-010 provides that any person who knowingly violates KRS 224.70-110 or other enumerated statutes, or who knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall be guilty of a Class D felony and, upon conviction, shall be punished by a fine of not more than \$25,000, or by imprisonment for not more than one (1) year, or both. Each day upon which a violation occurs shall constitute a separate violation.

## 2.11. Signatory Requirement

- (1) All applications, reports, or information submitted to the Director shall be signed and certified pursuant to 401 KAR 5:060, Section 4 [40 CFR 122.22].

(2) KRS 224.99-010 provides that any person who knowingly provides false information in any document filed or required to be maintained under KRS Chapter 224 shall be guilty of a Class D felony and upon conviction thereof, shall be punished by a fine not to exceed twenty-five thousand dollars (\$25,000), or by imprisonment, or by fine and imprisonment, for each separate violation. Each day upon which a violation occurs shall constitute a separate violation.

## **2.12. Reporting Requirements**

### **2.12.1. Planned Changes**

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(1) The alteration or addition to a permitted facility may meet one (1) of the criteria for determining whether a facility is a new source in KRS 224.16-050 [40 CFR 122.29(b)]; or

(2) 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 KRS 224.16-050 [40 CFR 122.42(a)(1)].

(3) 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.

### **2.12.2. Anticipated Noncompliance**

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

### **2.12.3. Transfers**

This permit is not transferable to any person except after notice to the Director. The Director 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 KRS 224 [CWA; see 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory].

### **2.12.4. Monitoring Reports**

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.

(2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 401 KAR 5:065, Section 2(8) [40 CFR 136], or another method required for an industry-specific waste stream under 401 KAR 5:065, Section 2(9) or (10) [40 CFR subchapters N or O], the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

(3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

#### **2.12.5. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

#### **2.12.6. Twenty-four-Hour Reporting**

(1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 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.

(2) The following shall be included as information which must be reported within twenty-four (24) hours under this paragraph.

- a) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See §122.41(g))
- b) Any upset which exceeds any effluent limitation in the permit.
- c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within twenty-four (24) hours.

(3) The Director may waive the written report on a case-by-case basis under 40 CFR 122.41 (l), if the oral report has been received within twenty-four (24) hours.

#### **2.12.7. Other Noncompliance**

The permittee shall report all instances of noncompliance not reported under Sections 2.12.1, 2.12.4, 2.12.5 and 2.12.6, at the time monitoring reports are submitted. The reports shall contain the information listed in Section 2.12.6.

#### **2.12.8. 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 Director, it shall promptly submit such facts or information.

### **2.13. Bypass**

#### **2.13.1. Definitions**

(1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

(2) Severe property damage means 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.

#### **2.13.2. 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 Section 2.13.3 and 2.13.4.

### **2.13.3. Notice**

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section 2.12.6.

### **2.13.4. Prohibition of Bypass**

(1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

- a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- b) 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
- c) The permittee submitted notices as required under Section 2.13.3.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three (3) conditions listed above in Section 2.13.4.

## **2.14. Upset**

### **2.14.1. Definition**

Upset means 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.

### **2.14.2. 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 Section 2.14.3 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.

### **2.14.3. 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:

- (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
- (2) The permitted facility was at the time being properly operated; and
- (3) The permittee submitted notice of the upset as required in Section 2.12.6; and
- (4) The permittee complied with any remedial measures required under Section 2.4.

### **2.14.4. Burden of Proof**

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.



# **SECTION 3**

## **BEST MANAGEMENT PRACTICES (BMP) PLAN REQUIREMENTS**

### 3. BEST MANAGEMENT PRACTICES PLAN REQUIREMENTS

The permittee shall develop and implement a BMP plan consistent with 401 KAR 5:065, Section 2(4).

#### 3.1. Applicability

These conditions apply to all permittees who use, manufacture, store, handle, or discharge any pollutant listed as: (1) toxic under Section 307(a)(1) of the Clean Water Act; (2) oil, as defined in Section 311(a)(1) of the Act; (3) any pollutant listed as hazardous under Section 311 of the Act; or (4) is defined as a pollutant pursuant to KRS 224.1-010(35) and who have operations which could result in (1) the release of a hazardous substance, pollutant, or contaminant, or (2) an environmental emergency, as defined in KRS 224.1-400, as amended, or any regulation promulgated pursuant thereto (hereinafter, the "BMP pollutants"). These operations include material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas.

#### 3.2. Plan

The permittee shall develop and implement a BMP plan consistent with 401 KAR 5:065, Section 2(4) pursuant to KRS 224.70-110, which prevents or minimizes the potential for the release of "BMP pollutants" from ancillary activities through site runoff; spillage or leaks, sludge or waste disposal; or drainage from raw material storage.

#### 3.3. Implementation

The permittee shall implement the BMP plan upon of the commencement of regulated activity. Modifications to the plan as a result of ineffectiveness or plan changes to the facility shall be implemented as soon as possible.

#### 3.4. General Requirements

The BMP plan shall:

- (1) Be documented in narrative form, and shall include any necessary plot plans, drawings, or maps.
- (2) Establish specific objectives for the control of toxic and hazardous pollutants.
  - a. Each facility component or system shall be examined for its potential for causing a release of "BMP pollutants" due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.
  - b. Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances which could result in a release of "BMP pollutants", the plan should include a prediction of the direction, rate of flow, and total quantity of the pollutants which could be released from the facility as result of each condition or circumstance.
- (3) Establish specific BMPs to meet the objectives identified under paragraph b of this section, addressing each component or system capable of causing a release of "BMP pollutants".
- (4) Include any special conditions established in part b of this section.
- (5) Be reviewed by engineering staff and the site manager.

### **3.5. Specific Requirements**

The plan shall be consistent with the general guidance contained in the publication entitled "NPDES Best Management Practices Guidance Document", and shall include the following baseline BMPs as a minimum:

- (1) BMP Committee
- (2) Reporting of BMP Incidents
- (3) Risk Identification and Assessment
- (4) Employee Training
- (5) Inspections and Records
  - a. Preventive Maintenance
- (6) Good Housekeeping
- (7) Materials Compatibility
- (8) Security
- (9) Materials Inventory

#### **3.5.1. Outfalls 007, 010, 011, 014, 015, 017, 018, 019, 020, 021, 022**

The BMP plan shall mention the controls and practices used to control or abate the discharge of pollutants in stormwater discharges from these outfalls.

#### **3.5.2. Outfall 012**

The BMP plan shall mention the controls and practices used to minimize the release of oxidants into the Clearwell Settling Pond during bromination of the cooling tower waters.

#### **3.5.3. Polychlorinated Biphenyls**

The BMP plan shall mention the controls and practices used to meet the no discharge requirement for polychlorinated biphenyl compounds.

### **3.6. SPCC Plans**

The BMP plan may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 151, and may incorporate any part of such plans into the BMP plan by reference.

### **3.7. Hazardous Waste Management**

The permittee shall assure the proper management of solids and hazardous waste in accordance with the regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1978 (RCRA) (40 U.S.C. 6901 et seq.) Management practices required under RCRA regulations shall be referenced in the BMP plan.

### **3.8. Documentation**

The permittee shall maintain a copy of the BMP plan at the facility and shall make the plan available upon request to EEC personnel.

### **3.9. BMP Plan Modification**

The permittee shall modify the BMP plan whenever there is a change in the facility or change in the operation of the facility that materially increases the potential for the release of "BMP pollutants".

### **3.10. Modification for Ineffectiveness**

The BMPs and the BMP plan shall be reviewed and appropriate modifications implemented to utilize other practicable measures if any of the following events occur:

- (1) As a result of either a fixed or episodic event-driven evaluation, the permittee determines the selected BMPs are not achieving the established performance benchmarks;
- (2) As a result of deficiencies identified during an evaluation or inspection by Cabinet personnel ; or
- (3) An unauthorized release or discharge of any petroleum-based product, toxic or hazardous substance, except for releases contained within secondary containment.

**3.11. Periodically Discharged Wastewaters Not Specifically Covered by Effluent Conditions**

The permittee shall include in this BMP plan procedures and controls necessary for the handling of periodically discharged wastewaters such as intake screen backwash, meter calibration, fire protection, hydrostatic testing water, water associated with demolition projects, etc.

# **SECTION 4**

## **WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS**

#### 4. WET TESTING REQUIREMENTS

The permittee shall initiate, within thirty (30) days of the effective date of this permit, or continue the series of tests described below to evaluate wastewater toxicity of the discharge from Outfalls 001, 002A, 012 and 023.

##### 4.1. Sampling Requirements

###### Outfall 001 - Chronic

Tests shall be conducted on a minimum of three (3) 24-hour composite samples shall be collected at a frequency of one (1) 24-hour composite every other day. For example, the first sample would be used for test initiation on day 1 and for test solution renewal on day 2. The second sample would be used for test solution renewal on days 3 and 4. The third sample would be used for test solution renewal on days 5, 6, and 7. Each 24-hour composite shall be collected using a refrigerated automatic sampler. Each 24-hour composite sample shall consist of not less than forty-eight (48) discrete aliquots of effluent. Aliquots shall be of equal volume and time-proportional unless effluent flow is expected to vary by more than 10% from one hour to another or by 50% over the 24-hour collection period (as predicted from historical trends, significant rainfall events, etc.). With anticipated effluent flow variation of greater than 10% per hour or 50% overall, the frequency, and volume of each aliquot shall be flow-proportional. The lapsed time from collection of the last aliquot of the composite and its first use for test initiation or for test solution renewal shall not exceed 36 hours.

###### Outfalls 002A, 023, and 025 - Acute

Tests shall be conducted on each of two grab samples collected over the period of discharge, (i.e., discrete sample #1 taken at commencement of discharge, sample #2 taken approximately 12 hours later, sooner if discharge is expected to cease). The elapsed time between the collection of each grab sample and the initiation of each test shall not exceed 36 hours.

Samples shall be iced and maintained at not greater than 6 °C during collection, storage, transport and until used in the test by the laboratory.

##### 4.2. Test Requirements

###### Outfall 001 - Chronic

The Chronic WET test requirements consists of 1 short-term static-renewal water flea (Ceriodaphnia dubia) life-cycle test and 1 short-term static-renewal fathead minnow (Pimephales promelas) growth test on 8.44% effluent (11.84 TU<sub>C</sub>) at the frequency specified. The test shall begin within 36 hours of the collection of the day 1 sample. The test shall be renewed daily using: samples collected on days 1, 3; and 5 in accordance with test method specified in the Test Methods Section below.

###### Outfalls 002A - Acute

The Acute WET test requirements consists of two 48-hour static non-renewal toxicity tests with water flea (Ceriodaphnia dubia, Daphnia magna, or Daphnia pulex) and two 48-hour static non-renewal toxicity tests with fathead minnow (Pimephales promelas) performed on discrete grab samples of 100% effluent (1.00 TU<sub>A</sub>) at the frequency specified. Testing of each sample shall begin within 36 hours of the collection of that sample.

###### Outfalls 023 - Acute

The Acute WET test requirements consists of two 48-hour static non-renewal toxicity tests with water flea (Ceriodaphnia dubia, Daphnia magna, or Daphnia pulex) and two 48-hour static non-renewal toxicity tests with fathead minnow (Pimephales promelas) performed on discrete grab samples of 12.5% effluent (8.00

TU<sub>A</sub>) at the frequency specified. Testing of each sample shall begin within 36 hours of the collection of that sample.

#### **Outfalls 025 - Acute**

The Acute WET test requirements consists of two 48-hour static non-renewal toxicity tests with water flea (Ceriodaphnia dubia, Daphnia magna, or Daphnia pulex) and two 48-hour static non-renewal toxicity tests with fathead minnow (Pimephales promelas) performed on discrete grab samples of 11.61% effluent (8.61 TU<sub>A</sub>) at the frequency specified. Testing of each sample shall begin within 36 hours of the collection of that sample.

#### **4.3. Serial Dilutions**

Effluent concentrations for the tests must include the percent effluent required by the permit and at least four additional effluent concentrations.

For a required percent effluent of 100%, test concentrations shall be 20%, 40%, 60%, 80% and 100%.

For a required percent effluent less than 100% but greater than or equal to 75%, the test concentrations shall include the required percent effluent, two (2) concentrations below that are based on a 0.5 dilution factor, and two (2) concentrations above: one (1) at mid-point between 100% and the required percent effluent, and one (1) at 100% effluent.

For a required percent effluent less than 75%, test concentrations shall include the required percent effluent, two (2) concentrations below on a 0.5 dilution factor, and two (2) concentrations above the required percent effluent based on a 0.5 dilution factor, if possible; otherwise, one (1) at mid-point between 100% and the required percent effluent, and one (1) at 100% effluent.

Selection of different effluent concentrations must be approved by DOW prior to testing. Controls shall be conducted concurrently with effluent testing using synthetic water.

#### **4.4. Controls**

Control tests shall be conducted concurrent with effluent testing using synthetic water. The analysis will be deemed reasonable and good only if the minimum control requirements are met.

Any test that does not meet the control acceptability criteria shall be repeated as soon as practicable within the monitoring period.

Within 30 days prior to initiating an effluent toxicity test, a reference toxicant test must be completed for the method used; alternatively, the reference toxicant test may be run concurrent with the effluent toxicity test.

#### **Outfall 001 - Chronic**

For the Ceriodaphnia test: at least 80% survival of all control organisms and an average of fifteen (15) or more young per surviving female in the control solutions; and 60% of surviving control females must produce three broods.

For the fathead minnow test: at least 80% survival in controls and the average dry weight per surviving organism in control chambers equals or exceeds 0.25 mg.

#### **Outfalls 002A, 023, and 025 - Acute**

Control survival is 90% or greater in test organisms held in synthetic water.

#### 4.5. Test Methods

##### Outfall 001 - Chronic

All test organisms, procedures and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (4<sup>th</sup> Edition), EPA-821-R-02-013, the most recent edition of this publication, or as approved in advance by DOW.

##### Outfalls 002A, 023, and 025 - Acute

All test organisms, procedures, and quality assurance criteria used shall be in accordance with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA-821-R-02-012 (5<sup>th</sup> edition), the most recently published edition of this publication, or as approved in advance by DOW.

#### 4.6. Reduction to Single Species Testing

After at least six (6) consecutive passing toxicity tests using both, the water flea and the fathead minnow, a request for testing with only the most sensitive species may be submitted to DOW. Upon approval, the most sensitive species may be considered as representative and all subsequent compliance tests may be conducted using only that species unless directed at any time by DOW to change or revert to both.

#### 4.7. Reduction in Monitoring Frequency

The permittee may request a reduction in the frequency of WET testing upon demonstration that no test failures, incomplete tests, or invalid tests occurred during the following specified timeframes:

- (1) Existing facilities: four (4) consecutive quarters;
- (2) New or expanded facilities: eight (8) consecutive quarters.

New and expanded facilities are defined in the above Requirements Effective Dates Section of this permit. In the event of the failure of an annual test or non-submission by January 28<sup>th</sup> of the year following the completion of the test, the permittee will again be subject to quarterly WET testing.

#### 4.8. Reporting Requirements

Results of all toxicity tests conducted with any species shall be reported according to the most recent format provided by DOW (See the Section for Submission of DMRs of this permit). Notification of failed test shall be made to DOW within five days of test completion. Test reports shall be submitted to DOW within thirty (30) days of completion. A control chart including the most recent reference toxicant test endpoints for the effluent test method (minimum of 5, up to 20 if available) shall be part of the report.

#### 4.9. Test Results

If noncompliance occurs in an initial test, the permittee shall repeat the test using new samples. Results of this second round of testing will be used to evaluate the persistence of the toxic event and the possible need for a Toxicity Reduction Evaluation (TRE).

##### Outfall 001 - Chronic

Noncompliance with the toxicity limit is demonstrated if the IC<sub>25</sub> (inhibition concentration) for reproduction or growth is less than 8 % effluent. If noncompliance occurs in an initial test, the permittee must repeat the test using a new set of three (3) composite samples. Sampling must be initiated within fifteen (15) days of completing the failed test. The second round of testing shall include both species unless approved for only the most sensitive species by DOW.

##### Outfalls 002A - Acute



Noncompliance is demonstrated if the LC<sub>50</sub> is less than 100 % effluent. If noncompliance occurs in an initial test, the permittee shall repeat the test using new grab samples collected approximately twelve (12) hours apart. Sampling must be initiated within ten (10) days of completing the failed test. The second round of testing shall include both species unless approved for only the most sensitive species by DOW.

**Outfall 023 - Acute**

Noncompliance is demonstrated if the LC<sub>50</sub> is less than 12.5 % effluent. If noncompliance occurs in an initial test, the permittee shall repeat the test using new grab samples collected approximately twelve (12) hours apart. Sampling must be initiated within ten (10) days of completing the failed test. The second round of testing shall include both species unless approved for only the most sensitive species by DOW.

**Outfall 025 - Acute**

Noncompliance is demonstrated if the LC<sub>50</sub> is less than 11.61 % effluent. If noncompliance occurs in an initial test, the permittee shall repeat the test using new grab samples collected approximately twelve (12) hours apart. Sampling must be initiated within ten (10) days of completing the failed test. The second round of testing shall include both species unless approved for only the most sensitive species by DOW.

**4.10. Accelerated Testing**

If the second round of testing also demonstrates noncompliance, the permittee will be required to perform accelerated testing as specified in the following paragraphs.

Complete four (4) additional rounds of testing to evaluate the frequency and degree of toxicity within sixty (60) days of completing the second failed round of testing. Results of the initial and second rounds of testing specified above plus the four (4) additional rounds of testing will be used in deciding if a TRE shall be required.

If results from any two (2) of six (6) rounds of testing show a significant noncompliance with the Toxicity limit, i.e.,  $\geq 1.2$  times the TU, or results from any four of the six tests show toxicity as defined above, a TRE will be required.

The permittee shall provide written notification to DOW within five (5) days of completing the accelerated testing, stating that: (1) toxicity persisted and that a TRE will be initiated; or (2) that toxicity did not persist and normal testing will resume.

Should toxicity prove not to be persistent during the accelerated testing period, but reoccur within twelve (12) months of the initial failure at a level  $\geq 1.2$  times the TU, then a TRE shall be required.

**4.11. WET TRE**

Having determined that a TRE is required, the permittee shall initiate and/or continue at least monthly testing with both species until such time as a specific TRE plan is approved by DOW. A TRE plan shall be developed by the permittee and submitted to DOW within thirty (30) days of determining a TRE is required. The plan shall be developed in accordance with the most recent Environmental Protection Agency (EPA) and DOW guidance. Questions regarding this process may be submitted to DOW.

The TRE plan shall include Toxic Identification Evaluation (TIE) procedures, treatability studies, and evaluations of: chemical usage including changes in types, handling and suppliers; operational and process procedures; housekeeping and maintenance activities; and raw materials. The TRE plan will establish an implementation schedule to begin immediately upon approval by DOW, to have duration of at least six (6) months, and not to exceed twenty-four (24) months. The implementation schedule shall include quarterly progress reports being submitted to DOW, due the last day of the month following each calendar quarter.

Upon completion of the TRE, the permittee shall submit a final report detailing the findings of the TRE and actions taken or to be taken to prevent the reoccurrence of toxicity. This final report shall include: the

toxicant(s), if any are identified; treatment options; operational changes; and the proposed resolutions including an implementation schedule not to exceed one-hundred-eighty (180) days.

Should the permittee determine the toxicant(s) and/or a workable treatment prior to the planned conclusion of the TRE, the permittee will notify DOW within five (5) days of making that determination and take appropriate actions to implement the solution within one-hundred-eighty (180) days of that notification.

# **SECTION 5**

## **OTHER CONDITIONS**

**5. OTHER CONDITIONS**

**5.1. Schedule of Compliance**

The permittee shall attain compliance with all requirements of this permit on the effective date of this permit unless otherwise stated.

**5.2. Other Permits**

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

**5.3. Continuation of Expiring Permit**

This permit shall be continued in effect and enforceable after the expiration date of the permit provided the permittee submits a timely and complete application in accordance with 401 KAR 5:060, Section 2(4).

**5.4. Antidegradation**

For those discharges subject to the provisions of 401 KAR 10:030 Section, 1(3)(b)5, the permittee shall install, operate, and maintain wastewater treatment facilities consistent with those identified in the SDAA submitted with the KPDES permit application.

**5.5. Reopener Clause**

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved in accordance with 401 KAR 5:050 through 5:080, if the effluent standard or limitation so issued or approved:

- (1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- (2) Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

**5.6. Outfall 002A**

The permittee and Sierra Club entered into a consent decree, Civil Action No. 3:14-CV-391-H, December 14, 2016. One of the conditions in the decree is that Outfall 002 can only make direct discharges to the Ohio River under certain circumstances. Those circumstances are:

- 1. Emergency situations which include, but are not limited to, circumstances in which LG&E deem it necessary in operating the station to make direct discharges from Outfall 002 in order to prevent overtopping of the impoundments for the Main Ash Pond, to ensure the structural integrity of the impoundments for the pond, or to prevent or mitigate the loss of or damage to life, health, property, or essential public services.
- 2. Planned direct discharges in order to conduct maintenance, repairs, or inspection of either or both discharge pipes from Outfall 002 to Outfall 001.

To distinguish internal discharges versus external discharges, any external discharge from Outfall 002 to the Ohio River will be designated as a discharge through Outfall 002A.

**5.7. Cooling Water Additives, FIFRA, and Mollusk Control**

The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in cooling water which ultimately may be released to the waters of the Commonwealth is prohibited,

except Herbicides, unless specifically identified and authorized by the KPDES permit. In the event the permittee needs to use a biocide or chemical not previously reported for mollusk control or other purpose, the permittee shall submit sufficient information, a minimum of thirty (30) days prior to the commencement of use of said biocides or chemicals to the Division of Water for review and establishment of appropriate control parameters.

**5.8. 316(b) Cooling Water Intake Structure**

The permittee shall use this permitting cycle to gather the application materials required within 40 CFR 122.21(r) necessary to establish impingement mortality and entrainment BTA requirements as applicable under 40 CFR 125.94(c) and (d). This information shall be included with the next KPDES permit renewal application for this facility, unless an alternate schedule for the submission of the information required is granted.

**5.9. Polychlorinated Biphenyls**

Pursuant to the requirements of 40 CFR Part 423.12(b)(2), there shall be no discharge, from any point source, of Polychlorinated Biphenyl compounds such as those commonly used in transformer fluids.

**5.10. Selective Catalytic Reduction Devices or Systems (SCRs) and Selective Non-Catalytic Reduction Devices or Systems (SNCR)**

In response to Clean Air Act amendments and recent EPA rules, the installation of these devices for NOx reduction may become necessary. Associated with the installation and operation of these units, an “ammonia slip” may occur resulting in the discharge of ammonia to the ash pond. The impact of such an occurrence on the performance of the ash pond and any eventual impact on the environment is not known. Therefore, should it become necessary to install these devices, the permittee shall develop and implement an Ammonia Monitoring Plan. The plan shall be submitted to the DOW within ninety (90) days of the determination that these devices will be installed, and shall include at a minimum influent and effluent monitoring of each unit on a monthly bases with submission of the data as a quarterly report. If such a plan already exists, then the plan should be appropriately modified during each installation of additional SCR or SNCR devices or systems.

**5.11. Outfall Signage for Monitored Points**

The permittee shall comply with the permanent marker requirements of ORSANCO’s Pollution Control Standards.

The KPDES permit establishes monitoring points, effluent limitations, and other conditions to address discharges from the permitted facility. In an effort to better document and clarify these locations the permittee should place and maintain a permanent marker at each of the monitoring locations.

**5.12. Monitoring Point Accessibility**

All monitoring points required by this permit shall be readily and safely accessible.

**5.13. Additional Requirements for Total Recoverable Selenium**

**5.13.1. Outfall 001 and Outfall 002A**

For Outfalls 001 and 002A, the monthly average discharge concentration for total recoverable Selenium of 0.056 mg/l is a trigger that once exceeded requires the permittee to collect and analyze fish tissue for Selenium residue.

**5.13.1.1. Tissue Collection and Analysis**

The following requirements apply:

- (1) Collection and analysis shall be performed within the calendar month following the calendar month the 0.056 mg/l monthly average trigger was exceeded;
- (2) Fish tissue collection and analysis shall be performed in accordance with the DOW protocols specified in "Methods for the Collection of Selenium Residue in Fish Tissue Used to Determine KPDES Permit Compliance" (available at <http://water.ky.gov/Pages/SurfaceWaterSOP.aspx>);
- (3) Results of the analysis shall be reported as Total Recoverable Selenium (Fish Tissue) on the Discharge Monitoring Report (DMR) for the month during which the analysis were performed.

#### **5.13.1.2. Results of Analysis**

The results of the fish tissue shall be interpreted as follows:

- (1) less than or equal to 8.6 mg/Kg dry weight Selenium residue there is no permit violation;
- (2) greater than 8.6 mg/Kg dry weight Selenium residue there is a permit violation; and
- (3) unable to obtain fish tissue, the 0.056 mg/l trigger becomes the effluent limitation and there is a permit violation.

#### **5.13.2. Outfall 023**

For 023, the monthly average discharge concentration for total recoverable Selenium of 24.0 mg/l is a trigger that once exceeded requires the permittee to collect and analyze fish tissue for Selenium residue.

##### **5.13.2.1. Tissue Collection and Analysis**

The following requirements apply:

- (1) Collection and analysis shall be performed within the calendar month following the calendar month the 24.0 mg/l monthly average trigger was exceeded;
- (2) Fish tissue collection and analysis shall be performed in accordance with the DOW protocols specified in "Methods for the Collection of Selenium Residue in Fish Tissue Used to Determine KPDES Permit Compliance" (available at <http://water.ky.gov/Pages/SurfaceWaterSOP.aspx>);
- (3) Results of the analysis shall be reported as Total Recoverable Selenium (Fish Tissue) on the Discharge Monitoring Report (DMR) for the month during which the analysis were performed.

##### **5.13.2.2. Results of Analysis**

The results of the fish tissue shall be interpreted as follows:

- (1) less than or equal to 8.6 mg/Kg dry weight Selenium residue there is no permit violation;
- (2) greater than 8.6 mg/Kg dry weight Selenium residue there is a permit violation; and
- (3) unable to obtain fish tissue, the 24.0 mg/l trigger becomes the effluent limitation and there is a permit violation.

#### **5.13.3. Outfall 025**

For Outfall 025, the monthly average discharge concentration for total recoverable Selenium of 0.628 mg/l is a trigger that once exceeded requires the permittee to collect and analyze fish tissue for Selenium residue.

##### **5.13.3.1. Tissue Collection and Analysis**

The following requirements apply:

- (4) Collection and analysis shall be performed within the calendar month following the calendar month the 0.628 mg/l monthly average trigger was exceeded;
- (5) Fish tissue collection and analysis shall be performed in accordance with the DOW protocols specified in "Methods for the Collection of Selenium Residue in Fish Tissue Used to Determine KPDES Permit Compliance" (available at <http://water.ky.gov/Pages/SurfaceWaterSOP.aspx>);

- (6) Results of the analysis shall be reported as Total Recoverable Selenium (Fish Tissue) on the Discharge Monitoring Report (DMR) for the month during which the analysis were performed.

#### **5.13.3.2. Results of Analysis**

The results of the fish tissue shall be interpreted as follows:

- (4) less than or equal to 8.6 mg/Kg dry weight Selenium residue there is no permit violation;
- (5) greater than 8.6 mg/Kg dry weight Selenium residue there is a permit violation; and
- (6) unable to obtain fish tissue, the 0.628 mg/l trigger becomes the effluent limitation and there is a permit violation.

#### **5.14. Section 311, Clean Water Act Exclusion**

The permittee is relieved of the reporting and liability requirements under Section 311 of the Clean Water Act for the following substances, consistent with Exclusion 2, authorized by Section 311(a)(a)(B) and 40 CFR 117.12 for: Ammonium Hydroxide, Sodium Hypochlorite, Ethylene Diaminetetracetic Acid (EDTA), Sodium Hydroxide, Sodium Nitrite, Sodium Phosphate (Dibasic), and Sulfuric Acid.

#### **5.15. Combustion Residual Leachate**

Pursuant to 40 CFR 423.11(r), the term combustion residual leachate (“leachate”) means “leachate from landfills or surface impoundments containing combustion residuals. Leachate is composed of liquid, including any suspended or dissolved constituents in the liquid, that has percolated through waste or other materials emplaced in a landfill, or that passes through the surface impoundment’s containment structure (*e.g.*, bottom, dikes, berms). Combustion residual leachate includes seepage and/or leakage from a combustion residual landfill or impoundment unit. Combustion residual leachate includes wastewater from landfills and surface impoundments located on non-adjointing property when under the operational control of the permitted facility.”

This permit authorizes the discharge of leachate from outfalls 001, 002A, and 025. For newly discovered leachate seeps from a CCR surface impoundment or a CCR landfill, as defined at 40 CFR 257.53, to the surface that discharge or have a potential to discharge to a water of the commonwealth other than through outfalls 001, 002A, and 025 the permittee shall develop and implement a plan to address such surface seeps. The plan shall be included as part of the on-site BMP Plan and shall address, at a minimum, (1) scheduled inspections for identifying surface leachate seeps, (2) maintenance of CCR landfills and/or impoundments to minimize the potential for surface leachate seeps, and (3) corrective measures that will be implemented upon the discovery of a surface leachate seep that is not being controlled by a permitted outfall authorized for discharge of leachate. The permittee shall notify the DOW Surface Water Permits Branch and the appropriate DOW Field Office of planned corrective measures for any identified surface seeps of leachate as soon as feasible after discovery of such a leachate seep, but no later than ten (10) days after the discovery. Such corrective measures may include: (1) plans to reduce or eliminate the leachate seep to the surface; (2) actions to route the surface leachate seep (via a conveyance designed to contain the flow or eliminate the possibility of infiltration) to an outfall permitted to discharge leachate; and (3) combinations of actions to eliminate or, if elimination is not feasible, reduce and control a surface leachate seep and ensure any discharge to a receiving stream is authorized by the permit. Please note that this does not exempt the permittee from 24-hour reporting Section 2.12 of the permit.

# **SECTION 6**

## **MONITORING AND REPORTING REQUIREMENTS**



## **6. MONITORING AND REPORTING REQUIREMENTS**

### **6.1. KPDES Outfalls**

Discharge samples and measurements shall be collected at the compliance point for each KPDES Outfall identified in this permit. Each sample shall be representative of the volume and nature of the monitored discharge.

### **6.2. Sufficiently Sensitive Analytical Methods**

Analytical methods utilized to demonstrate compliance with the effluent limitations established in this permit shall be sufficiently sensitive to detect pollutant levels at or below the required effluent limit, i.e. the Method Minimum Level shall be at or below the effluent limit. In the instance where an EPA-approved method does not exist that has a Method Minimum Level at or below the established effluent limitation, the permittee shall:

- (1) Use the method specified in the permit; or
- (2) The EPA-approved method with an ML that is nearest to the established effluent limit.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

### **6.3. Certified Laboratory Requirements**

All laboratory analyses and tests required to demonstrate compliance with the conditions of this permit shall be performed by EEC certified general wastewater laboratories.

### **6.4. Submission of DMRs**

The completed DMR for each monitoring period must be entered into the DOW approved electronic system no later than midnight on the 28<sup>th</sup> day of the month following the monitoring period for which monitoring results were obtained.

For more information regarding electronic submittal of DMRs, please visit the Division's website at: <https://eec.ky.gov/Environmental-Protection/Water/SubmitReport/Pages/NetDMR.aspx> or contact the DMR Coordinator at (502) 564-3410.