KPDES

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT NO.: KY0022250

AGENCY INTEREST NO.: 3004

Pursuant to Authority in KRS 224,

East Kentucky Power Cooperative, Inc.
4775 Lexington Road
Winchester, Kentucky 40391

is authorized to discharge from a facility located at

EKPC H.L. Spurlock Power Station
1301 West Second Street
Maysville, Mason County, Kentucky

to receiving waters named

Ohio River

UT to Lawrence Creek

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

This permit shall become effective on January 1, 2019.

This permit and the authorization to discharge shall expire at midnight, December 31, 2023.

October 23, 2018

Date Signed

Sara J Lindersun

Peter T. Goodmann, Director

Division of Water

THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS:

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°42'9.1"	83°48'52.8"	Ohio River	Current - Discharge from the Secondary Lagoon which contains flows from the following: Cooling tower blowdown, coal pile runoff, FGD wastewater, low volume waste, ash sluice water, chemical and nonchemical metal cleaning wastewater, and stormwater
					Ash Pond Dewatering-The ash pond will be decanted and pumped to the Secondary Lagoon. The discharge will contain all the flows mentioned above.
					Future - Discharge from the Secondary Lagoon which contains flows from the following: Cooling tower blowdown, coal pile runoff, treated FGD wastewater, low volume waste, chemical and nonchemical metal cleaning wastewater, stormwater and new water mass balance pond
002	Internal	38°41'59.4"	83°48'46.3"	Outfall 001	Unit #1 Cooling Tower Blowdown
003	Internal	38°41'59.6"	83°48'46.3"	Outfall 001	Unit #2 Cooling Tower Blowdown
004	Internal	Varies	Varies	Outfall 001	Chemical Metal Cleaning Wastewater
005	External	38°42'9.8"	83°48'59.3"	Ohio River	Emergency Coal Pile Runoff
006	External	38°42'7.9"	83°48'50.4"	Ohio River	Stormwater Runoff
007	External	38°42'0.2"	83°48'46.9"	Ohio River	Reverse Osmosis Reject
008	External	38°41'9.01"	83°49'46.76"	UT to Lawrence Creek	Coal Combustion Residual Landfill Leachate and Stormwater Runoff
009	External	38°42'9.6"	83°48'23.5"	Plant Intake from Ohio River	Raw Water Intake
010	Internal	38°41'59.5"	83°48'47.9"	Outfall 001	Unit #3 Cooling Tower Blowdown
011	External	38°41'43.15"	83°50'16.77"	UT to Lawrence Creek	Tier 1 - Coal Combustion Residual Landfill Stormwater Runoff
					Tier 2- Coal Combustion Residual Landfill Leachate and Stormwater Runoff
012	Internal	38°41'51.5"	83°48'39.56"	Outfall 001	Unit #4 Cooling Tower Blowdown
013	Internal	38°42'06.7"	83°49'22.3"	Outfall 001	FGD Wastewater
00A	External	N/A[1]	N/A[1]	Ohio River	Stormwater from Road west of Coal Storage Area
00B	External	N/A[1]	N/A[1]	Ohio River	Stormwater from area around Fuel Oil Tanks
00C	External	N/A[1]	N/A[1]	Ohio River	Stormwater from area around Waste Water Treatment

TABLE 1.					
Outfall No.	**Outfall Type**	**Latitude (N)**	**Longitude (W)**	**Receiving Water**	**Description of Outfall**
00D	External	N/A[1]	N/A[1]	Ohio River	Stormwater from Unit 1 and 2 Cooling Towers
00E	External	N/A[1]	N/A[1]	Ohio River	Stormwater from Unit 3 and 4 Cooling Towers and Acid storage tanks
00F	External	N/A[1]	N/A[1]	Ohio River	Stormwater from area between Ash Pond and Railroad tracks and road west of Ash Pond
00G	External	N/A[1]	N/A[1]	Lawrence Creek	Stormwater from main Entrance Road
00H	External	N/A[1]	N/A[1]	Lawrence Creek	Stormwater from Road south Coal Storage Area
00I	External	N/A[1]	N/A[1]	UT to Lawrence Creek	Stormwater from north Haul Road drainage
00J	External	N/A[1]	N/A[1]	Lawrence Creek	Stormwater from east Haul Road drainage
00K	External	N/A[1]	N/A[1]	UT to Lawrence Creek	Stormwater from landfill access road
00L	External	N/A[1]	N/A[1]	UT to Lawrence Creek	Stormwater from landfill access road
[1]These outfall represent drainage areas for stormwater that are to be covered under BMP's. Plant Drainage Area Map can be found in the KPDES application					

1.2. Effluent Limitations and Monitoring Requirements

1.2.1. Outfall 001

Outfall 001 will undergo operational changes as the facility transitions from existing conditions of an active ash pond to proposed conditions of a process water basin. To accomplish this, the ash pond will be dewatered and closed. 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 days prior to commencement of dewatering operations. The permittee shall also notify the Division of Water, Surface Water Permits Branch at least 30 days prior to when dewatering operations are complete.

Beginning on the effective date and lasting through the term of this permit or commencement of Ash Pond dewatering, 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	**Daily Maximum**	**Minimum**	**Monthly Average**	**Daily Maximum**	**Maximum**		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	Continuous	Recorder
Temperature	°F	N/A	N/A	N/A	Report	110	N/A	2/Month	Grab
Total Suspended Solids	mg/l	N/A	N/A	N/A	30.0	78.9	N/A	2/Month	Grab

TABLE 2.									
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	8.9	11.9	N/A	2/Month	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	2/Month	Grab
Total Recoverable Selenium	mg/l	N/A	N/A	N/A	0.307	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	([3])	([3])
Total Recoverable Thallium	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Acute WET[1]	TU_A	N/A	N/A	N/A	N/A	N/A	1.00	1/Year	([2])
[1]WET – Whole Effluent Toxicity									
[2]Two (2) discrete grab samples shall be collected 12 hours apart									
[3]Should the monthly average concentration of Total Recoverable Selenium exceed 0.307 mg/l, see permit Section 5.10 for additional requirements.									
There shall be no discharge of pollutants in bottom or fly ash transport water generated on and after December 31, 2023.									

Upon commencement of Ash Pond dewatering and lasting through the term of this permit or completion of Ash Pond dewatering, 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	Continuous	Recorder
Temperature	°F	N/A	N/A	N/A	Report	110	N/A	2/Month	Grab
Total Suspended Solids	mg/l	N/A	N/A	N/A	30.0	78.9	N/A	2/Month	Grab
Oil & Grease	mg/l	N/A	N/A	N/A	8.9	11.9	N/A	2/Month	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	2/Month	Grab
Total Recoverable Selenium	mg/l	N/A	N/A	N/A	0.307	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	([4])	([4])
Hardness (as mg/l $CaCO_3$)	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Grab
Total Recoverable Antimony[1]	mg/l	N/A	N/A	N/A	9.27	Report	N/A	1/Month	Grab
Total Recoverable Arsenic[1]	mg/l	N/A	N/A	N/A	0.31	0.31	N/A	1/Month	Grab
Total Recoverable Beryllium[1]	mg/l	N/A	N/A	N/A	6.60	Report	N/A	1/Month	Grab
Total Recoverable Cadmium[1]	mg/l	N/A	N/A	N/A	0.0081	0.0081	N/A	1/Month	Grab
Total Recoverable Chromium[1]	mg/l	N/A	N/A	N/A	164.4	Report	N/A	1/Month	Grab
Total Recoverable Copper[1]	mg/l	N/A	N/A	N/A	0.047	0.047	N/A	1/Month	Grab
Total Recoverable Lead[1]	mg/l	N/A	N/A	N/A	0.020	0.020	N/A	1/Month	Grab
Total Recoverable Mercury[1]	mg/l	N/A	N/A	N/A	0.000046	0.0013	N/A	1/Month	Grab
Total Recoverable Nickel[1]	mg/l	N/A	N/A	N/A	1.37	1.37	N/A	1/Month	Grab
Total Recoverable Silver[1]	mg/l	N/A	N/A	N/A	Report	0.037	N/A	1/Month	Grab
Total Recoverable Thallium[1]	mg/l	N/A	N/A	N/A	0.40	0.40	N/A	1/Month	Grab
Total Recoverable Zinc[1]	mg/l	N/A	N/A	N/A	0.35	0.35	N/A	1/Month	Grab
Acute WET[2]	TU_A	N/A	N/A	N/A	N/A	N/A	1.00	1/Month	([3])

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		
[1]The Monthly Average and Daily Maximum concentrations for these pollutants are not effluent limitations, but water quality triggers that, if exceeded for two (2) consecutive months, require permittee action. See the Best Management Practices Plan Section - Additional BMP Conditions Subsection for additional requirements related to these triggers.									
[2]WET – Whole Effluent Toxicity									
[3]Two (2) discrete grab samples shall be collected 12 hours apart									
[4]Should the monthly average concentration of Total Recoverable Selenium exceed 0.307 mg/l, see permit Section 5.10 for additional requirements.									
There shall be no discharge of pollutants in bottom or fly ash transport water generated on and after December 31, 2023.									

Upon completion of Ash Pond dewatering and water mass balance pond is operational and lasting through the term of this permit, discharges from Outfall 001 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	Continuous	Recorder
Temperature	°F	N/A	N/A	N/A	Report	110	N/A	2/Month	Grab
Total Suspended Solids	mg/l	N/A	N/A	N/A	30.0	66.7	N/A	2/Month	Grab
Oil & Grease	mg/l	N/A	N/A	N/A	6.0	8.0	N/A	2/Month	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	2/Month	Grab
Total Recoverable Selenium	mg/l	N/A	N/A	N/A	0.307	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	([3])	([3])
Total Recoverable Thallium	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Acute WET[1]	TU_A	N/A	N/A	N/A	N/A	N/A	1.00	1/Year	([2])
[1]WET – Whole Effluent Toxicity									
[2]Two (2) discrete grab samples shall be collected 12 hours apart									
[3]Should the monthly average concentration of Total Recoverable Selenium exceed 0.307 mg/l, see permit Section 5.10 for additional requirements.									

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**		
There shall be no discharge of pollutants in bottom or fly ash transport water generated on and after December 31, 2023.									

1.2.2. Outfall 002

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 002 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	Continuous	Recorder
Free Available Chlorine[1]	mg/l	N/A	N/A	N/A	0.2	0.5	N/A	1/Occurrence[2]	Multiple Grab[3]
Total Residual Oxidants[1,4]	mg/l	N/A	N/A	N/A	Report	0.2	N/A	1/Occurrence[2]	Multiple Grab[3]
Oxidant Discharge Time[1]	Min/unit/day	N/A	N/A	N/A	N/A	120	N/A	1/Occurrence[2]	Log
Total Chromium[1]	mg/l	N/A	N/A	N/A	0.2	0.2	N/A	1/Year	Grab
Total Zinc[1]	mg/l	N/A	N/A	N/A	1.0	1.0	N/A	1/Year	Grab
Priority Pollutants[1,5]	No Detectable Amount							1/Year	Calculated[6]
[1]Sampling of cooling tower blowdown must be taken at the nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.									
[2]The measurement frequency "Occurrence" means during periods of chlorination or oxidation addition to cooling water, but no more frequent than once per week.									
[3]The sample type 'Multiple Grab' means grab samples collected at the approximate beginning of oxidant discharge and once every fifteen (15) minutes thereafter until the end of the oxidant discharge.									
[4]The term Total Residual Oxidants (TRO) means the value obtained by using the amperometric titration or DPD methods for Total Residual Chlorine described in 40 CFR Part 136. In the event of addition of an oxidant other than Chlorine, the permittee shall receive prior approval from the DOW permitting staff before the initial use. TRO monitoring and limits only apply if the applicant chooses to utilize an oxidant other than Chlorine.									
[5]Priority Pollutants are those contained in chemicals added for cooling tower maintenance and shall be monitored annually by grab sample or by engineering calculations. The results of the analyses/engineering calculations shall be totaled and reported as a single concentration on the DMR. The laboratory bench sheets/engineering or electronic equivalent calculations showing the results for each pollutant shall be attached to the DMR. The term priority pollutants means the 126 priority pollutants listed in 40 CFR Part 423 Appendix A except total chromium and total zinc.									

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		
[6]Compliance with the limitations, for the 126 priority pollutants, in paragraph (b)(10) of 40 CFR 423.15 may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.									
Neither free available chlorine nor total residual chlorine or oxidants may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available chlorine or total residual chlorine or oxidants at any one time unless the utility can demonstrate to the DOW that the units in a particular location cannot operate at or below this level of chlorination or oxidant addition.									

1.2.3. 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	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	Continuous	Recorder
Free Available Chlorine[1]	mg/l	N/A	N/A	N/A	0.2	0.5	N/A	1/Occurrence[2]	Multiple Grab[3]
Total Residual Oxidants[1,4]	mg/l	N/A	N/A	N/A	Report	0.2	N/A	1/Occurrence[2]	Multiple Grab[3]
Oxidant Discharge Time[1]	Min/unit/day	N/A	N/A	N/A	N/A	120	N/A	1/Occurrence[2]	Log
Total Chromium[1]	mg/l	N/A	N/A	N/A	0.2	0.2	N/A	1/Year	Grab
Total Zinc[1]	mg/l	N/A	N/A	N/A	1.0	1.0	N/A	1/Year	Grab
Priority Pollutants[1,5]	No Detectable Amount							1/Year	Calculated[6]
[1]Sampling of cooling tower blowdown must be taken at the nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.									
[2]The measurement frequency “Occurrence” means during periods of chlorination or oxidation addition to cooling water, but no more frequent than once per week.									
[3]The sample type ‘Multiple Grab’ means grab samples collected at the approximate beginning of oxidant discharge and once every fifteen (15) minutes thereafter until the end of the oxidant discharge.									
[4]The term Total Residual Oxidants (TRO) means the value obtained by using the amperometric titration or DPD methods for Total Residual Chlorine described in 40 CFR Part 136. In the event of addition of an oxidant other than Chlorine, the permittee shall receive prior approval from the DOW permitting staff before the initial use. TRO monitoring and limits only apply if the applicant chooses to utilize an oxidant other than Chlorine.									

TABLE 6.									
EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs./day)		Concentrations				Frequency	Sample Type
		Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
[5]Priority Pollutants are those contained in chemicals added for cooling tower maintenance and shall be monitored annually by grab sample or by engineering calculations. The results of the analyses/engineering calculations shall be totaled and reported as a single concentration on the DMR. The laboratory bench sheets/engineering or electronic equivalent calculations showing the results for each pollutant shall be attached to the DMR. The term priority pollutants means the 126 priority pollutants listed in 40 CFR Part 423 Appendix A except total chromium and total zinc.									
[6]Compliance with the limitations, for the 126 priority pollutants, in paragraph (b)(10) of 40 CFR 423.15 may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.									
Neither free available chlorine nor total residual chlorine or oxidants may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available chlorine or total residual chlorine or oxidants at any one time unless the utility can demonstrate to the DOW that the units in a particular location cannot operate at or below this level of chlorination or oxidant addition.									

1.2.4. 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	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Batch[1]	Instantaneous
Total Recoverable Copper	mg/l	N/A	N/A	N/A	1.0	1.0	N/A	1/Batch[1]	Grab
Total Recoverable Iron	mg/l	N/A	N/A	N/A	1.0	1.0	N/A	1/Batch[1]	Grab
[1]Monitoring shall be conducted once per metal cleaning operation.									

1.2.5. 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	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Discharge	Instantaneous
Total Suspended Solids	mg/l	N/A	N/A	N/A	Report	50	N/A	1/Discharge	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Discharge	Grab
Hardness (as mg/l $CaCO_3$)	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Discharge	Grab
Total Recoverable Arsenic	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Discharge	Grab
Total Recoverable Cadmium	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Discharge	Grab
Total Recoverable Chromium	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Discharge	Grab
Total Recoverable Copper	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Discharge	Grab
Total Recoverable Lead,	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Discharge	Grab
Total Recoverable Mercury	ng/l	N/A	N/A	N/A	Report	Report	N/A	1/Discharge	Grab
Total Recoverable Nickel	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Discharge	Grab
Total Recoverable Silver	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Discharge	Grab
Total Recoverable Zinc	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Discharge	Grab
The monitoring frequency for this outfall is once per discharge, but no more frequent than once per quarter. Should more than one discharge occur during a given quarter the permittee will be responsible for collection at least one of those discharges.									

1.2.6. 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	Daily Maximum	Minimum	Monthly Average	Daily Maximum	Maximum		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous
Settleable Solids	mg/l	N/A	N/A	N/A	Report	Report	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

1.2.7. Outfall 007

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 007 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		
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	30.0	100.0	N/A	1/Quarter	Grab
Oil & Grease	mg/l	N/A	N/A	N/A	15.0	20.0	N/A	1/Quarter	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab
Total Recoverable Thallium	µg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab

1.2.8. Outfall 008

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 008 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	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	100.0	N/A	1/Month	Grab
Oil & Grease	mg/l	N/A	N/A	N/A	15.0	20.0	N/A	1/Month	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab
Total Recoverable Thallium	µg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Selenium	µg/l	N/A	N/A	N/A	Report	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	Report	1/Year	([1])

[1]See Section 5.11 of the permit for additional requirements.

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 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	Daily	Grab
Temperature	°F	N/A	N/A	N/A	Report	Report	N/A	Daily	Grab
[1]Cooling Water Intake Inspection	Fail=1 Pass=0	N/A	N/A	N/A	N/A	N/A	Report[2]	1/Week	Inspection[3]

[1]Weekly monitoring of the cooling water intake system shall be performed, during the period the cooling water intake structure is in operation, to ensure that the design and construction technology required by §125.94 (i.e., intake flow commensurate with closed cycle cooling) is functioning as designed and are being appropriately maintained and operated.

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		
[2]If the intake flow through the screen is not commensurate with closed cycle cooling a "1" is to be reported. If intake flow is commensurate with closed cycle cooling "0" is to be reported									
[3]This inspection may take the form of either visual inspections or the use of remote monitoring devices.									

1.2.10. Outfall 010

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 010 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	Continuous	Recorder
Free Available Chlorine[1]	mg/l	N/A	N/A	N/A	0.2	0.5	N/A	1/Occurrence[2]	Multiple Grab[3]
Total Residual Oxidants[1,4]	mg/l	N/A	N/A	N/A	Report	0.2	N/A	1/Occurrence[2]	Multiple Grab[3]
Oxidant Discharge Time[1]	Min/unit/day	N/A	N/A	N/A	N/A	120	N/A	1/Occurrence[2]	Log
Total Chromium[1]	mg/l	N/A	N/A	N/A	0.2	0.2	N/A	1/Year	Grab
Total Zinc[1]	mg/l	N/A	N/A	N/A	1.0	1.0	N/A	1/Year	Grab
Priority Pollutants[1,5]	No Detectable Amount							1/Year	Calculated[6]
[1]Sampling of cooling tower blowdown must be taken at the nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.									
[2]The measurement frequency "Occurrence" means during periods of chlorination or oxidation addition to cooling water, but no more frequent than once per week.									
[3]The sample type 'Multiple Grab' means grab samples collected at the approximate beginning of oxidant discharge and once every fifteen (15) minutes thereafter until the end of the oxidant discharge.									
[4]The term Total Residual Oxidants (TRO) means the value obtained by using the amperometric titration or DPD methods for Total Residual Chlorine described in 40 CFR Part 136. In the event of addition of an oxidant other than Chlorine, the permittee shall receive prior approval from the DOW permitting staff before the initial use. TRO monitoring and limits only apply if the applicant chooses to utilize an oxidant other than Chlorine.									
[5]Priority Pollutants are those contained in chemicals added for cooling tower maintenance and shall be monitored annually by grab sample or by engineering calculations. The results of the analyses/engineering calculations shall be totaled and reported as a single concentration on the DMR. The laboratory bench sheets/engineering or electronic									

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		
equivalent calculations showing the results for each pollutant shall be attached to the DMR. The term priority pollutants means the 126 priority pollutants listed in 40 CFR Part 423 Appendix A except total chromium and total zinc.									
[6]Compliance with the limitations, for the 126 priority pollutants, in paragraph (b)(10) of 40 CFR 423.15 may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.									
Neither free available chlorine nor total residual chlorine or oxidants may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available chlorine or total residual chlorine or oxidants at any one time unless the utility can demonstrate to the DOW that the units in a particular location cannot operate at or below this level of chlorination or oxidant addition.									

1.2.11. Outfall 011 Tier 1

Beginning on the effective date and lasting through the term of this permit or until land leachate starts discharging through this outfall, discharges from Outfall 011 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	100.0	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 011 Tier 2

Once landfill leachate starts discharging through this outfall and lasting through the term of this permit, discharges from Outfall 011 shall comply with the following effluent limitations. The permittee shall notify the Division of Water, Surface Water Permits Branch at least 30 days prior to commencement of land fill leachate discharging through outfall 011 requesting to switch to the Tier 2 limits

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/Month	Instantaneous
Total Suspended Solids	mg/l	N/A	N/A	N/A	30.0	100.0	N/A	1/Month	Grab
Oil & Grease	mg/l	N/A	N/A	N/A	15.0	20.0	N/A	1/Month	Grab
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab
Hardness (as mg/l $CaCO_3$)	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Antimony	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Arsenic	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
Total Recoverable Beryllium	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Quarter	Grab
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 Selenium	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 Thallium	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

1.2.14. 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 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	Continuous	Recorder
Free Available Chlorine[1]	mg/l	N/A	N/A	N/A	0.2	0.5	N/A	1/Occurrence[2]	Multiple Grab[3]
Total Residual Oxidants[1,4]	mg/l	N/A	N/A	N/A	Report	0.2	N/A	1/Occurrence[2]	Multiple Grab[3]
Oxidant Discharge Time[1]	Min/unit/day	N/A	N/A	N/A	N/A	120	N/A	1/Occurrence[2]	Log
Total Chromium[1]	mg/l	N/A	N/A	N/A	0.2	0.2	N/A	1/Year	Grab
Total Zinc[1]	mg/l	N/A	N/A	N/A	1.0	1.0	N/A	1/Year	Grab
Priority Pollutants[1,5]	No Detectable Amount							1/Year	Calculated[6]

[1]Sampling of cooling tower blowdown must be taken at the nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.

[2]The measurement frequency "Occurrence" means during periods of chlorination or oxidation addition to cooling water, but no more frequent than once per week.

[3]The sample type 'Multiple Grab' means grab samples collected at the approximate beginning of oxidant discharge and once every fifteen (15) minutes thereafter until the end of the oxidant discharge.

[4]The term Total Residual Oxidants (TRO) means the value obtained by using the amperometric titration or DPD methods for Total Residual Chlorine described in 40 CFR Part 136. In the event of addition of an oxidant other than Chlorine, the permittee shall receive prior approval from the DOW permitting staff before the initial use. TRO monitoring and limits only apply if the applicant chooses to utilize an oxidant other than Chlorine.

[5]Priority Pollutants are those contained in chemicals added for cooling tower maintenance and shall be monitored annually by grab sample or by engineering calculations. The results of the analyses/engineering calculations shall be totaled and reported as a single concentration on the DMR. The laboratory bench sheets/engineering or electronic equivalent calculations showing the results for each pollutant shall be attached to the DMR. The term priority pollutants means the 126 priority pollutants listed in 40 CFR Part 423 Appendix A except total chromium and total zinc.

[6]Compliance with the limitations, for the 126 priority pollutants, in paragraph (b)(10) of 40 CFR 423.15 may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.

Neither free available chlorine nor total residual chlorine or oxidants may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available chlorine or total residual chlorine or oxidants at any one time unless the utility can demonstrate to the DOW that the units in a particular location cannot operate at or below this level of chlorination or oxidant addition.

1.2.15. Outfall 013

Beginning on December 1, 2023 and lasting through the term of this permit, discharges from Outfall 013 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	1/Month	Instantaneous
Total Recoverable Arsenic	µg/l	N/A	N/A	N/A	8	11	N/A	1/Month	Grab
Total Recoverable Mercury	ng/l	N/A	N/A	N/A	356	788	N/A	1/Month	Grab
Total Recoverable Selenium	µg/l	N/A	N/A	N/A	12	23	N/A	1/Month	Grab
Nitrate/nitrite as N	mg/l	N/A	N/A	N/A	4.4	17.0	N/A	1/Month	Grab

1.2.16. Outfalls 00A, 00B, 00C, 00D, 00E, 00F, 00G, 00H, 00I, 00J, 00K, and 00L

Beginning on the effective date and lasting through the term of this permit, discharges from Outfalls 00A, 00B, 00C, 00D, 00E, 00F, 00G, 00H, 00I, 00J, 00K, and 00L shall comply with the following effluent limitations:

TABLE 18.									
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 theses 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.									

1.3. 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 less than one (1) year and not more than five (5) years, or by both fine and imprisonment for each separate violation.. 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 preceding the permittee seeking to establish the occurrence of an upset has the burden of proof.

SECTION 3

BEST MANAGEMENT PRACTICES PLAN (BMPP) REQUIREMENTS

3. BEST MANAGEMENT PRACTICES PLAN (BMPP) REQUIREMENTS

The permittee shall develop and implement a Best Management Practices Plan (BMPP) 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 BMPP 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 BMPP 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 BMPP 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
(6) Preventive Maintenance
(7) Good Housekeeping
(8) Materials Compatibility
(9) Security
(10) Materials Inventory

3.6. SPCC Plans

The BMPP 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 BMPP 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 BMPP at the facility and shall make the plan available upon request to EEC personnel.

3.9. BMP Plan Modification

The permittee shall modify the BMPP 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 BMPP 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 a notice of deficiency from an evaluation or inspection by Cabinet personnel; or

(3) A release to the environment/beyond secondary containment of any petroleum-based product, toxic or hazardous substance.

3.11. Periodically Discharged Wastewater 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.

3.12. Additional BMP Conditions during Dewatering

3.12.1. BMP Evaluation Triggers

Water Quality Trigger: The monthly average and daily maximum discharge concentrations for the listed metals in table 3 are triggers that once exceeded for two (2) consecutive months requires the permittee to initiate an evaluation of the currently employed BMP's related to dewatering.

WET Trigger: The permittee shall review the BMPs currently employed, related to dewatering, when the findings of a Toxicity Reduction Evaluation (TRE) indicates that one or more of the pollutants monitored was the toxicant.

3.12.2. Evaluation of BMPs

The permittee shall notify DOW within five (5) days that a BMP evaluation trigger has occurred and within forty five (45) days shall complete a BMP evaluation.

At a minimum, the findings of this evaluation shall include:

1) A list of known, practicable control measures;
2) The order of implementing identified control measures;
3) Monitoring plans and schedules to support evaluating the effectiveness of each control measure;
4) A description of decision-making criteria and timelines for evaluating whether a particular measure has been effective and whether additional or different measures are required;
5) Identification of a process for revising the BMP Plan (BMPP) should data obtained from monitoring the effectiveness of particular control measures warrant such revisions; and
6) Any proposed changes to the BMPP shall be implemented within 90 days of the finalization of evaluation.

SECTION 4

WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

4. WHOLE EFFLUENT TOXICITY (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 Outfall 001.

4.1. Sampling Requirements

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.

4.2. Test Requirements

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_A) 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.

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

4.5. Test Methods

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 (5th 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. 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.

4.8. 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).

Noncompliance is demonstrated if the LC_{50} 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.

4.9. 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., ≥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 ≥ 1.2 times the TU, then a TRE shall be required.

4.10. 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. 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.

5.7. Outfall Signage

Ohio River

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

Other Waterbodies

This 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.

5.8 Cooling Water Intake Requirements

5.8.1 Authority to Operate

The permittee shall at all times properly operate and maintain all water intake facilities. The permittee shall give advance notice to the Division of any planned changes in the location, design, operation, or capacity of the intake structure. The permittee is authorized to use the cooling water intake system which consists of the following:

Spurlock Station Cooling Water Intake Structure is located at N 38°42'09" W 83°48'23" on the south bank of the Ohio River, which has a $7Q_{10}$ flow of 10,600 cfs. The cooling water intake structure is a single wet well that houses five pumps, three for the Spurlock Station and two for the adjacent International Paper facility. The wet well has two independent cylindrical wedge wire screen assemblies mounted to a bulkhead on the northern face of the structure. The screens are each located at the end of separate 15-foot intake pipelines. The screen elevation is approximately 473 feet and the normal pool depth of the Ohio River is that area is approximately 485 feet, indicating that screens remain submerged at all times. Water withdrawn from the cooling water intake structure by Spurlock Station is used for makeup to the stations four cooling towers. Spurlock Station has three raw water pumps in the intake structure that provide the makeup water. Each pump has a design capacity of 5,000 gpm, resulting in a 15,000gpm maximum design capacity for makeup. International Paper has two 2,000-gpm constant –speed pumps. Under normal operations, one of the raw water makeup pumps will run continuously. Spurlock Station has four mechanical draft cooling towers with drift eliminators. Units 1, 3, and 4 are currently operated at 7 cycles of concentration on average, and Unit 2 is operated at 7.5 cycles of concentration on average. Well water from the facility groundwater wells can also be used for makeup on cooling tower unit 1. Approximately 50 percent of the cooling tower unit 1 makeup comes from the intake structure and the remaining 50 percent is well water. The maximum design intake flow (for both facilities combined) is 27.4 MGD (42.41 cfs), which is equivalent to 0.4% of the $7Q_{10}$. This is based upon all five of the intake pumps capacity. The through-screen design intake velocity at the point of withdrawal is 0.41 ft/s (with one screen out of service). The actual intake flow (for both facilities combined) is 8.83 MGD (13.67 cfs), which is equivalent to 0.13% of the $7Q_{10}$. The actual intake velocity is 0.13 ft/s (with one screen out of service). These figures are based on the annual average withdrawal rate during January 2015 – June 2017. Approximately 70 percent of all water withdrawn from the Ohio River is used for non-contact cooling, which is being used for makeup at the Spurlock Station cooling towers. There is no emergency intake at the facility.

5.8.2. Best Technology Available (BTA) Determination

The cooling water intake is approved as BTA for minimizing adverse environmental impact in accordance with the requirements in 40 CFR 125 Subpart J and section 316(b) of the Clean Water Act. The chosen impingement method of compliance is the closed-cycle recirculating system of 40 CFR 125.94(c)(1).

5.8.3. Intake Structure Standard Requirements

5.8.3.1. Future BTA Determinations for Cooling Water Intake Structure(s)

BTA determinations for entrainment mortality and impingement mortality at cooling water intake structures will be re-confirmed in each permit reissuance, in accordance with 40 CFR 125.90-98. In subsequent permit reissuance applications, the permittee shall provide all the information required in 40 CFR 122.21(r).

Also include an alternatives analysis report for compliance with the entrainment BTA requirements with the permit application. This alternatives analysis report for entrainment BTA shall examine the options for compliance with the entrainment BTA requirement and propose a candidate entrainment BTA to the Division for consideration during its next BTA determination. The analysis must, at least, narratively, address and consider the factors listed in 40 CFR 125.98(f)(2) and may consider the factors listed in 40 CFR 125.98(f)(3). The analysis must evaluate, at a minimum, closed cycle recirculation systems, fine mesh screens with a mesh size of 2mm or smaller, variable speed pumps, water reuse or alternate sources of cooling water, and any additional technology identified by the Division at a later date.

Exemptions from some permit application requirements are possible in accordance with 40 CFR 125.95(c) and 125.98(g), where information already submitted is sufficient. If an exemption is desired, a request for reduced application material requirements must be submitted at least 2 years and 6 months prior to permit expiration. Past submittals and previously conducted studies may satisfy some or all of the application material requirements.

5.8.3.2. Visual or Remote Inspection

The permittee shall conduct a weekly visual inspection or employ a remote monitoring device during periods when the cooling water intake is in operation. The inspection frequency shall be weekly to ensure the intakes are maintained and operated to function as designed.

5.8.3.3. Reporting Requirements for Cooling Water Intake

The permittee shall adhere to the reporting requirements listed below:

Discharge Monitoring Reports (DMRs)

The monitoring requirements for units at existing facilities under 40 CFR 125.96 for cooling water withdrawals, blowdown volume, and visual or remote inspections have been established at the appropriate outfalls and shall be reported on the DMR for those outfalls.

Annual certification Statement and Report

Submit an annual certification statement signed by the authorized representative with information on the following, no later than January 31st for the previous year:

- Certification that water intake structure technologies are being maintained and operated as set forth in this permit, or a justification to allow a modification of the practices.
- If there are substantial modifications to the operation of any unit that impacts the cooling water withdrawals or operation of the water intake structure, provide a summary of those changes.
- If the information contained in the previous year's annual certification is still applicable, the certification may simply state as such.

Reporting Records Retention

In accordance with 40 CFR 125.97 (d) records of all submissions that are part of the permit application and reporting requirements must be retained until the subsequent permit is issued to document compliance. Additionally, all records supporting the determination of BTA for entrainment under 40 CFR 125.98(f) or (g) must be retained until such time the determination of BTA for entrainment in the permit is revised.

5.8.3.4. Endangered Species Act

Nothing in this permit authorizes take for the purpose of a facility's compliance with the Endangered Species Act. Refer to 40 CFR 125.98(b)(1) and (2).

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. The permittee shall implement this requirement as a specific section of the BMP plan developed for this section.

5.10. Outfall 001 Additional Requirements for Total Recoverable Selenium

The monthly average discharge concentration for total recoverable selenium of 0.307 mg/l is a trigger that once exceeded, requires the permittee to collect and analyze fish tissue for selenium residue, and is not a permit violation if the fish tissue confirms compliance.

5.10.2. Tissue Collection and Analysis

The following requirements apply:

(1) Collection and analysis shall be performed within the calendar month following the calendar month the 0.307 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" **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.

5.10.3. 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 0.307 mg/l trigger becomes the effluent limitation and there is a permit violation

5.11. Outfall 008 Additional Requirements for Total Recoverable Selenium

5.11.1. Tissue Collection and Analysis

The following requirements apply:

(1) Collection and analysis shall be performed on an annual basis.
(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" **http://water.ky.gov/Pages/SurfaceWaterSOP.aspx**. Due to the nature of the receiving steam the facility is permitted to begin the fish sampling at the first suitable permanent fish habitat in the Outfall 008 receiving stream. This would be the pool located below the manmade wetland diversion structure, approximately 725 m downstream from the outfall.

5.12. ORSANCO's Mercury Variance

The permittee requested a variance from ORSANCO's mercury standard of 0.000012 mg/l for effluent from this site which discharges to the Ohio River. The permittee is currently meeting Kentucky's water quality criteria for mercury. Mercury is a pollutant believed to be present in FGD wastewaters. The permittee is installing a new treatment system for FGD wastewaters in order to achieve compliance with new federal effluent limitation guidelines. Effluent from Outfall 001 will be partially comprised of treated FGD wastewaters, and the DOW believes the effluent will be able to continue meeting Kentucky's water quality criteria for mercury once the new treatment system is operational. The permittee is concerned the effluent will consistently meet ORSANCO's mercury standard. Given these circumstances, the DOW granted the variance ORSANCO's mercury standard and will apply Kentucky's water quality criteria for mercury for discharges to the Ohio River.

5.13. 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-adjoining property when under the operational control of the permitted facility."

This permit authorizes the discharge of leachate from outfall 008 and outfall 011. 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 outfall 008 or outfall 011, 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

6.1 MONITORING AND REPORTING REQUIREMENTS

6.1.1 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.

6.1.2 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.

6.1.3 Certified Laboratory Requirements

All laboratory analyses and tests required to demonstrate compliance with the conditions of this permit shall be performed by a laboratory holding the appropriate general or field-only certification issued by the Cabinet pursuant to 401 KAR 5:320.

6.1.4 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 28th 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: http://water.ky.gov/permitting/Pages/netDMRInformation.aspx or contact the DMR Coordinator at (502) 564-3410.