COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE REQUIREMENTS FOR INDUSTRIAL WASTEWATER FACILITIES

NPDES PERMIT NO: PA0002062
Amendment No. 2

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*,

Keystone-Conemaugh Projects, LLC
175 Cornell Road, Suite 1
Blairsville, PA 15717

is authorized to discharge from a facility known as **Keystone Generating Station**, located in **Plumcreek Township, Armstrong County**, to **Crooked Creek, unnamed tributary to Crooked Creek, Plum Creek, unnamed tributary to Plum Creek, and the Allegheny River** in Watershed(s) **17-E** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B and C hereof.

THIS PERMIT SHALL BECOME EFFECTIVE ON JANUARY 1, 2019

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON DECEMBER 31, 2023

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.

2. Failure to comply with the terms, conditions or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (40 CFR 122.41(a))

3. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. (40 CFR 122.41(b), 122.21(d)(2))

   In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. (25 Pa. Code §§ 92a.7 (b), (c))

4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

DATE PERMIT ISSUED December 10, 2018

DATE PERMIT AMENDMENT ISSUED June 30, 2020

ISSUED BY John A. Holden

John A. Holden, P.E.
Clean Water Program Manager
Northwest Regional Office

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. For Internal Monitoring Point 101

Receiving Waters: Allegheny River through Outfall 001

Type of Effluent: Treated FGD scrubber blowdown

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations (3)						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/day	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/week	Grab
Temperature (ºF)	XXX	XXX	XXX	XXX	110	XXX	Continuous	Recorded
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	25.0	50.0	XXX	1/week	24-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	10.0	20.0	XXX	1/week	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15.0	20.0	30	1/week	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Aluminum, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Arsenic, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Beryllium, Total	XXX	XXX	XXX	0.8	1.6	XXX	1/week	24-Hr Composite
Boron, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Cadmium, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite

Internal Monitoring Point 101, Continued (from January 1, 2019 through December 31, 2023)

Parameter	Effluent Limitations (3)						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Chromium III, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Copper, Total	XXX	XXX	XXX	0.1	0.2	XXX	1/week	24-Hr Composite
Iron, Dissolved	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Lead, Total	XXX	XXX	XXX	0.1	0.2	XXX	1/week	24-Hr Composite
Manganese, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Mercury, Total	XXX	XXX	XXX	0.004	0.008	XXX	1/week	24-Hr Composite
Nickel, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Selenium, Total	XXX	XXX	XXX	3.4	6.8	XXX	1/week	24-Hr Composite
Selenium, Dissolved	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Silver, Total	XXX	XXX	XXX	0.1	0.2	XXX	1/week	24-Hr Composite
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Zinc, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Chloride	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Bromide	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at the pump house

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. B. For Internal Monitoring Point 201

Receiving Waters: Allegheny River through Outfall 001

Type of Effluent: Treated wastewater from the Pigging Wastewater Treatment Facility

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations (3)						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/discharge	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/discharge	Grab
Temperature (ºF)	XXX	XXX	XXX	XXX	110	XXX	2/discharge	I-S
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	25.0	50.0	XXX	2/discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	10.0	20.0	XXX	2/discharge	Grab
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Oil and Grease	XXX	XXX	XXX	15.0	20.0	30	2/discharge	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Aluminum, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Arsenic, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Beryllium, Total	XXX	XXX	XXX	0.8	1.6	XXX	2/discharge	Grab
Boron, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Cadmium, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Chromium III, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab

Internal Monitoring Point 201, Continued (from January 1, 2019 through December 31, 2023)

Parameter	Effluent Limitations (3)						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Copper, Total	XXX	XXX	XXX	0.1	0.2	XXX	2/discharge	Grab
Iron, Dissolved	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Lead, Total	XXX	XXX	XXX	0.1	0.2	XXX	2/discharge	Grab
Manganese, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Mercury, Total	XXX	XXX	XXX	0.004	0.008	XXX	2/discharge	Grab
Nickel, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Selenium, Total	XXX	XXX	XXX	3.4	6.8	XXX	2/discharge	Grab
Selenium, Dissolved	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Silver, Total	XXX	XXX	XXX	0.1	0.2	XXX	2/discharge	Grab
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Zinc, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Chloride	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Bromide	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at the discharge from the Pigging Wastewater Treatment Facility prior to mixing with any other wastewater

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. C. For Outfall 001 , **Latitude** 40º 44' 31.00" , **Longitude** -79º 35' 11.00" , **River Mile Index** 0.3400 , **Stream Code** 42122

Receiving Waters: Allegheny River

Type of Effluent: Treated FGD scrubber blowdown (IMP 101) and effluent from the Pigging Wastewater Treatment Facility (IMP 201)

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations (3) (5)						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/discharge	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/discharge	Grab
Temperature (ºF)	XXX	XXX	XXX	XXX	110	XXX	2/discharge	I-S
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	25.0	50.0	XXX	2/discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	10.0	20.0	XXX	2/discharge	Grab
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Oil and Grease	XXX	XXX	XXX	15.0	20.0	30	2/discharge	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Aluminum, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Arsenic, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Beryllium, Total	XXX	XXX	XXX	0.8	1.6	XXX	2/discharge	Grab
Boron, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Cadmium, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Chromium III, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab

Outfall 001, Continued (from January 1, 2019 through December 31, 2023)

Parameter	Effluent Limitations (3) (5)						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Copper, Total	XXX	XXX	XXX	0.1	0.2	XXX	2/discharge	Grab
Iron, Dissolved	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Lead, Total	XXX	XXX	XXX	0.1	0.2	XXX	2/discharge	Grab
Manganese, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Mercury, Total	XXX	XXX	XXX	0.004	0.008	XXX	2/discharge	Grab
Nickel, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Selenium, Total	XXX	XXX	XXX	3.4	6.8	XXX	2/discharge	Grab
Selenium, Dissolved	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Silver, Total	XXX	XXX	XXX	0.1	0.2	XXX	2/discharge	Grab
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Zinc, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Chloride	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Bromide	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at the downstream side of the v-notch weir in the Transition Vault

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. D. For Outfall 002 **, Latitude** 40º 39' 56.00" **, Longitude** -79º 19' 47.00" **, River Mile Index** 0.1000 **, Stream Code** 46467

Receiving Waters: Plum Creek

Type of Effluent: Plum Creek intake screen backwash water

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations (8)						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Estimate

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 002

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. E. For Internal Monitoring Point 103

Receiving Waters: Crooked Creek through Outfall 003

Type of Effluent: Low volume waste sources (Unit #1 air preheat drainage and fire deluge drainage); overflows from the coal pile runoff ponds; groundwater infiltration; and uncontaminated storm water runoff from the #1 Yard Drains

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	100.0	XXX	1/discharge	Grab
Oil and Grease	XXX	XXX	XXX	15.0	20.0	XXX	1/discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 103. TSS, Oil and Grease, and pH monitoring apply to process wastewater contributions only. These sources are to be monitored prior to mixing with any other wastewater.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. F. For Internal Monitoring Point 203

Receiving Waters: Crooked Creek through Outfall 003

Type of Effluent: Emergency overflow from the bottom ash filter ponds containing bottom ash transport water and bottom ash hopper and seal trough overflow

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations (4)						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Daily when Discharging	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	Daily when Discharging	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.0	Daily when Discharging	Grab
Free Available Chlorine	XXX	XXX	XXX	0.2	0.5	XXX	Daily when Discharging	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	100.0	XXX	Daily when Discharging	Grab
Oil and Grease	XXX	XXX	XXX	15.0	20.0	XXX	Daily when Discharging	Grab
Chromium, Total (6)	XXX	XXX	XXX	0.2	0.2	XXX	Daily when Discharging	Grab
Zinc, Total (6)	XXX	XXX	XXX	1.0	1.0	XXX	Daily when Discharging	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 203

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. G. For Internal Monitoring Point 303

Receiving Waters: Crooked Creek through Outfall 003

Type of Effluent: Treated sewage

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2020**. (9)

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	0.4	Report	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	Daily when discharging	Grab
Dissolved Oxygen	XXX	XXX	Report	XXX	XXX	XXX	Daily when discharging	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	2.4	XXX	4.2	Daily when discharging	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	25.0	XXX	50.0	2/month	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60.0	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Chlorodibromomethane	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Dichlorobromomethane	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Chloroform	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Internal Monitoring Point 303

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. H. For Internal Monitoring Point 303

Receiving Waters: Crooked Creek through Outfall 003

Type of Effluent: Treated sewage

1. The permittee is authorized to discharge during the period from **January 1, 2021** through **December 31, 2023**. (9)

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	0.4	Report	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	Daily when discharging	Grab
Dissolved Oxygen	XXX	XXX	4.0	XXX	XXX	XXX	Daily when discharging	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	2.4	XXX	4.2	Daily when discharging	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	25.0	XXX	50.0	2/month	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60.0	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Chlorodibromomethane	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Dichlorobromomethane	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Chloroform	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Internal Monitoring Point 303

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. I. For Internal Monitoring Point 403

Receiving Waters: Crooked Creek through Outfall 003

Type of Effluent: Low volume wastewater treatment system effluent from plant drains; water treatment wastewater; Units 1 and 2 cooling tower drains; East Valley leachate; West Valley leachate; demineralizer wastewater; non-chemical metal cleaning wastes, coal pile runoff, and coal pile runoff pond underdrains

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/week	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.0	1/week	Grab
Free Available Chlorine	XXX	XXX	XXX	0.2	0.5	XXX	1/week	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	77.0	XXX	1/week	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15.0	20.0	XXX	1/week	Grab
Chromium, Total (6)	XXX	XXX	XXX	0.2	0.2	XXX	1/week	24-Hr Composite
Zinc, Total (6)	XXX	XXX	XXX	1.0	1.0	XXX	1/week	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 403

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. J. For Internal Monitoring Point 503

Receiving Waters: Crooked Creek through Outfall 003

Type of Effluent: Bottom ash transport water and bottom ash hopper and seal trough overflow discharged via the thermal pond

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations (4)						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/week	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.0	1/week	Grab
Free Available Chlorine	XXX	XXX	XXX	0.2	0.5	XXX	1/week	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	100.0	XXX	1/week	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15.0	20.0	XXX	1/week	Grab
Chromium, Total (6)	XXX	XXX	XXX	0.2	0.2	XXX	1/week	24-Hr Composite
Zinc, Total (6)	XXX	XXX	XXX	1.0	1.0	XXX	1/week	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 503

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. K. For Internal Monitoring Point 603

Receiving Waters: Crooked Creek through Outfall 003

Type of Effluent: Low volume waste sources (Unit #2 air preheat drainage, sterile water tank drainage, fire deluge drainage, chemical cleaning heat exchanger steam condensate drainage, and filtered water tank drainage); groundwater infiltration; uncontaminated storm water runoff from the #2 Yard Drains; Wastewater Treatment Plant area storm water; and groundwater drainage from the Gypsum Storage Area Settling Basin

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/month	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	100.0	XXX	1/discharge	Grab
Oil and Grease	XXX	XXX	XXX	15.0	20.0	XXX	1/discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 603. TSS, Oil and Grease, and pH monitoring apply to process wastewater contributions only. These sources are to be monitored prior to mixing with any other wastewater.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. L. For Internal Monitoring Point 703

Receiving Waters: Crooked Creek through Outfall 003

Type of Effluent: Leachate from the old ash disposal site treated by artificial wetlands

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/month	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	60.0	XXX	2/month	Grab
Iron, Total	XXX	XXX	XXX	3.0	6.0	XXX	2/month	Grab
Manganese, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 703

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. M. For Internal Monitoring Point 803

Receiving Waters: Crooked Creek through Outfall 003

Type of Effluent: Crooked Creek intake screen backwash water

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations (8)						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Estimate

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 803

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. N. For Internal Monitoring Point 903

Receiving Waters: Crooked Creek through Outfall 003

Type of Effluent: Storm water runoff from the old ash disposal site

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/6 months	Estimate
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Iron, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 903

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. O. **For Outfall** 003 , **Latitude** 40º 39' 19.00" , **Longitude** -79º 21' 6.00" , **River Mile Index** 28.76 , **Stream Code** 46216

Receiving Waters: Crooked Creek

Type of Effluent: Sources monitored at IMPs 103 through 903

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2021**. (7) (10)

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD) (11)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Recorded
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/week	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.18	XXX	0.33	1/week	Grab
Heat Rejection Rate (MBTUs/day) Jan 1 - 31	XXX	7347	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Feb 1 - 28	XXX	6673	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Mar 1 - 31	XXX	11960	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Apr 1 - 15	XXX	10983	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Apr 16 - 30	XXX	7515	XXX	XXX	XXX	XXX	1/day	Calculation

Outfall 003, Continued (from January 1, 2019 through December 31, 2021) (7) (10)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Heat Rejection Rate (MBTUs/day) May 1 - 15	XXX	9033	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) May 16 - 31	XXX	14754	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Jun 1 - 15	XXX	13516	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Jun 16 - 30	XXX	15946	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Jul 1 - 31	XXX	8740	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Aug 1 - 15	XXX	7796	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Aug 16 - 31	XXX	7217	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Sep 1 - 15	XXX	4828	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Sep 16 - 30	XXX	3717	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Oct 1 - 15	XXX	3805	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Oct 16 - 31	XXX	3814	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Nov 1 - 15	XXX	4487	XXX	XXX	XXX	XXX	1/day	Calculation

Outfall 003, Continued (from January 1, 2019 through December 31, 2021) (7) (10)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Heat Rejection Rate (MBTUs/day) Nov 16 - 30	XXX	4015	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Dec 1 – 31	XXX	Report	XXX	XXX	XXX	XXX	1/day	Calculation
Total Suspended Solids	XXX	XXX	XXX	30	100	XXX	1/week	24-Hr Composite
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Oil and Grease	XXX	XXX	XXX	15	20	30	1/week	Grab
Mercury, Total (µg/L)	XXX	XXX	XXX	0.098	0.2	XXX	1/week	Grab
Sulfate, Total	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Thallium, Total (µg/L)	XXX	XXX	XXX	3.0	6.0	XXX	1/week	24-Hr Composite
Chloride	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Bromide	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 003, except for flow (see Footnote 11)

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. P. For Outfall 003 **, Latitude** 40º 39' 19.00" **, Longitude** -79º 21' 6.00" **, River Mile Index** 28.76 **, Stream Code** 46216

Receiving Waters: Crooked Creek

Type of Effluent: Sources monitored at IMPs 103 through 903

1. The permittee is authorized to discharge during the period from **January 1, 2022** through **December 31, 2023**. (7) (10)

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD) (11)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Recorded
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/week	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.18	XXX	0.33	1/week	Grab
Heat Rejection Rate (MBTUs/day) Jan 1 - 31	XXX	7347	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Feb 1 - 28	XXX	6673	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Mar 1 - 31	XXX	11960	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Apr 1 - 15	XXX	10983	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Apr 16 - 30	XXX	7515	XXX	XXX	XXX	XXX	1/day	Calculation

Outfall 003, Continued (from January 1, 2022 through December 31, 2023) (7) (10)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Heat Rejection Rate (MBTUs/day) May 1 - 15	XXX	9033	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) May 16 - 31	XXX	14754	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Jun 1 - 15	XXX	13516	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Jun 16 - 30	XXX	15946	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Jul 1 - 31	XXX	8740	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Aug 1 - 15	XXX	7796	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Aug 16 - 31	XXX	7217	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Sep 1 - 15	XXX	4828	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Sep 16 - 30	XXX	3717	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Oct 1 - 15	XXX	3805	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Oct 16 - 31	XXX	3814	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Nov 1 - 15	XXX	4487	XXX	XXX	XXX	XXX	1/day	Calculation

Outfall 003, Continued (from January 1, 2022 through December 31, 2023) (7) (10)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Heat Rejection Rate (MBTUs/day) Nov 16 - 30	XXX	4015	XXX	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) Dec 1 – 31	XXX	1698	XXX	XXX	XXX	XXX	1/day	Calculation
Total Suspended Solids	XXX	XXX	XXX	30	100	XXX	1/week	24-Hr Composite
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Oil and Grease	XXX	XXX	XXX	15	20	30	1/week	Grab
Mercury, Total (µg/L)	XXX	XXX	XXX	0.098	0.2	XXX	1/week	Grab
Sulfate, Total	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Thallium, Total (µg/L)	XXX	XXX	XXX	0.532	0.831	1.33	1/week	24-Hr Composite
Chloride	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Bromide	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 003, except for flow (see Footnote 11)

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. Q. For Outfall 004 , **Latitude** 40º 40' 2.00" , **Longitude** -79º 19' 47.00" , **River Mile Index** 0.2000 , **Stream Code** 46467

Receiving Waters: Plum Creek

Type of Effluent: Storm water runoff

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Annual Average	Daily Maximum	Instant. Maximum		
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/6 months	Estimate
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	XXX	XXX	1/year	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Aluminum, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Iron, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Manganese, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Sulfate, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 004

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. R. For Internal Monitoring Point 106

Receiving Waters: Crooked Creek through Outfall 006

Type of Effluent: Gypsum Storage Area Storm Water Settling Basin principal spillway, storm water, and groundwater

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/month	Measured
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/month	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60.0	2/month	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Oil and Grease	XXX	XXX	XXX	15.0	20.0	30	2/month	Grab
Aluminum, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Zinc, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 106

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. S. For Internal Monitoring Point 206

Receiving Waters: Crooked Creek through Outfall 006

Type of Effluent: Gypsum Storage Area Storm Water Settling Basin emergency overflow

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/discharge	Measured
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60.0	2/discharge	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Oil and Grease	XXX	XXX	XXX	15.0	20.0	30	2/discharge	Grab
Aluminum, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab
Zinc, Total	XXX	XXX	XXX	Report	Report	XXX	2/discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 206

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. T. For Outfall 006 **, Latitude** 40º 39' 33.00" **, Longitude** -79º 20' 14.00" **, River Mile Index** 29.7600 **, Stream Code** 46216

Receiving Waters: Crooked Creek

Type of Effluent: Storm water runoff from the vegetated area adjacent to cooling towers 2A and 2B and sources monitored at IMPs 106 and 206

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Aluminum, Total	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Iron, Total	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Manganese, Total	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Zinc, Total	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 006

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. U. For Internal Monitoring Point 107

Receiving Waters: Crooked Creek through Outfall 007

Type of Effluent: Storm water runoff, acid mine drainage from two abandoned deep mine entries, and groundwater infiltration

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Quarterly	Daily Maximum	Daily Minimum	Average Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/quarter	Estimate
Total Flow (Total Volume, Mgal)	XXX	Report Total Qrtly	XXX	XXX	XXX	XXX	1/quarter	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/quarter	Grab
Total Suspended Solids	XXX	XXX	XXX	35.0	XXX	70.0	2/quarter	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Qrtly	XXX	XXX	XXX	XXX	1/quarter	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Aluminum, Total	XXX	XXX	XXX	Report	XXX	Report	2/quarter	Grab
Iron, Total	XXX	XXX	XXX	3.5	XXX	7.0	2/quarter	Grab
Manganese, Total	XXX	XXX	XXX	2.0	XXX	4.0	2/quarter	Grab
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	2/quarter	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Internal Monitoring Point 107

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. V. For Outfall 007 **, Latitude** 40º 39' 59.00" **, Longitude** -79º 20' 5.00" **, River Mile Index** 30.3400 **, Stream Code** 46216

Receiving Waters: Crooked Creek

Type of Effluent: Storm water runoff and sources monitored at IMP 107

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Quarterly	Daily Maximum	Daily Minimum	Average Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/quarter	Measured
pH (S.U.)	XXX	XXX	Report	XXX	Report	XXX	2/quarter	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	Report	XXX	2/quarter	Grab
Aluminum, Total	XXX	XXX	XXX	Report	Report	XXX	2/quarter	Grab
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	2/quarter	Grab
Manganese, Total	XXX	XXX	XXX	Report	Report	XXX	2/quarter	Grab
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	2/quarter	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 007

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. W. For Outfall 008 **, Latitude** 40º 40' 23.00" **, Longitude** -79º 19' 41.00" **, River Mile Index** 0.0800 **, Stream Code** 46468

Receiving Waters: Unnamed tributary to Plum Creek

Type of Effluent: Storm water runoff from the closed portions of the East Valley Ash Disposal Facility

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Annual Average	Daily Maximum	Instant. Maximum		
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/6 months	Estimate
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	XXX	XXX	1/year	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Aluminum, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chromium, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Iron, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Manganese, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 008

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. X. For Outfall 009 **, Latitude** 40º 40' 28.00" **, Longitude** -79º 19' 43.00" **, River Mile Index** 0.1200 **, Stream Code** 46468

Receiving Waters: Unnamed tributary to Plum Creek

Type of Effluent: Storm water runoff from closed portions and the perimeter of the East Valley Ash Disposal Facility

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Annual Average	Daily Maximum	Instant. Maximum		
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/6 months	Estimate
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	XXX	XXX	1/year	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Aluminum, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Iron, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 009

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. Y. **For Outfall** 010 , **Latitude** 40º 40' 3.00" , **Longitude** -79º 20' 21.00" , **River Mile Index** 0.5900 , **Stream Code** 46466

Receiving Waters: Unnamed tributary to Crooked Creek

Type of Effluent: Contact storm water from the West Valley Equalization Pond principal spillway in excess of 10-year, 24-hour storm

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/discharge	Measured
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	100.0	2/discharge	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Aluminum, Total	XXX	XXX	XXX	Report	XXX	Report	2/discharge	Grab
Iron, Total	XXX	XXX	XXX	3.5	XXX	7.0	2/discharge	Grab
Manganese, Total	XXX	XXX	XXX	2.0	XXX	4.0	2/discharge	Grab
Nickel, Total	XXX	XXX	XXX	Report	XXX	Report	2/discharge	Grab
Zinc, Total	XXX	XXX	XXX	Report	XXX	Report	2/discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 010

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. Z. For Outfall 011 , **Latitude** 40º 40' 5.00" , **Longitude** -79º 20' 23.00" , **River Mile Index** 0.62 , **Stream Code** 46466

Receiving Waters: Unnamed tributary to Crooked Creek

Type of Effluent: Storm water and leachate from the emergency spillway of the West Valley Equalization Pond

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/discharge	Measured
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	100.0	2/discharge	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Oil and Grease	XXX	XXX	XXX	15.0	20.0	XXX	2/discharge	Grab
Aluminum, Total	XXX	XXX	XXX	Report	XXX	Report	2/discharge	Grab
Iron, Total	XXX	XXX	XXX	3.5	XXX	7.0	2/discharge	Grab
Manganese, Total	XXX	XXX	XXX	2.0	XXX	4.0	2/discharge	Grab
Nickel, Total	XXX	XXX	XXX	Report	XXX	Report	2/discharge	Grab
Zinc, Total	XXX	XXX	XXX	Report	XXX	Report	2/discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 011

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. AA. For Outfall 012 **, Latitude** 40º 40' 6.00" **, Longitude** -79º 20' 24.00" **, River Mile Index** 0.6300 **, Stream Code** 46466

Receiving Waters: Unnamed tributary to Crooked Creek

Type of Effluent: Storm water diverted around the West Valley Equalization Pond through a bypass channel

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/discharge	Measured
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	100.0	2/discharge	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Aluminum, Total	XXX	XXX	XXX	Report	XXX	Report	2/discharge	Grab
Iron, Total	XXX	XXX	XXX	3.5	XXX	7.0	2/discharge	Grab
Manganese, Total	XXX	XXX	XXX	2.0	XXX	4.0	2/discharge	Grab
Nickel, Total	XXX	XXX	XXX	Report	XXX	Report	2/discharge	Grab
Zinc, Total	XXX	XXX	XXX	Report	XXX	Report	2/discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 012

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. BB. For Outfall 013 **, Latitude** 40º 40' 2.00" **, Longitude** -79º 20' 23.00" **, River Mile Index** 0.6000 **, Stream Code** 46466

Receiving Waters: Unnamed tributary to Crooked Creek

Type of Effluent: Groundwater underdrain from the West Valley Equalization Pond

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/month	Measured
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/month	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Arsenic, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Barium, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Manganese, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 013

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. CC. For Outfall 014 **, Latitude** 40º 40' 6.00" **, Longitude** -79º 20' 25.00" **, River Mile Index** 0.6300 **, Stream Code** 46466

Receiving Waters: Unnamed tributary to Crooked Creek

Type of Effluent: Groundwater underdrain header pipe for West Valley Disposal Site underdrains (beneath the lined disposal site)

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2021**. (7)

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/month	Estimate
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/month	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Arsenic, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Barium, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	Grab
Manganese, Total	XXX	XXX	XXX	Report	Report	XXX	1/week	Grab
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 014

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. DD. For Outfall 014 **, Latitude** 40º 40' 6.00" **, Longitude** -79º 20' 25.00" **, River Mile Index** 0.6300 **, Stream Code** 46466

Receiving Waters: Unnamed tributary to Crooked Creek

Type of Effluent: Groundwater underdrain header pipe for West Valley Disposal Site underdrains (beneath the lined disposal site)

1. The permittee is authorized to discharge during the period from **January 1, 2022** through **December 31, 2023**. (7)

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/month	Estimate
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/month	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Arsenic, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Barium, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Iron, Total	XXX	XXX	XXX	1.53	2.39	3.83	1/week	Grab
Manganese, Total	XXX	XXX	XXX	1.02	1.59	2.55	1/week	Grab
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 014

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. EE. For Outfall 015 **, Latitude** 40º 40' 2.00" **, Longitude** -79º 20' 17.00" **, River Mile Index** 0.4200 **, Stream Code** 46466

Receiving Waters: Unnamed tributary to Crooked Creek

Type of Effluent: Storm water runoff from undeveloped areas adjacent to the Ash Disposal Site

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Annual Average	Daily Maximum	Instant. Maximum		
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/6 months	Estimate
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	XXX	XXX	1/year	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Aluminum, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Iron, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 015

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. FF. For Outfall 021 **, Latitude** 40º 39' 54.00" **, Longitude** -79º 20' 2.00" **, River Mile Index** 0.2300 **, Stream Code** 46466

Receiving Waters: Unnamed Tributary to Crooked Creek

Type of Effluent: Limestone Stockpile Area Stormwater Runoff Settling Basin principal spillway

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/month	Measured
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/month	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60.0	2/month	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Oil and Grease	XXX	XXX	XXX	15.0	XXX	30.0	2/month	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 021

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. GG. For Outfall 022 **, Latitude** 40º 39' 51.00" **, Longitude** -79º 20' 8.00" **, River Mile Index** 0.2300 **, Stream Code** 46466

Receiving Waters: Unnamed tributary to Crooked Creek

Type of Effluent: Limestone Stockpile Area Stormwater Runoff Settling Basin emergency spillway

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/discharge	Estimate
Total Flow (Total Volume, Mgal)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Flow (Total Volume, Mgal)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	2/discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60.0	2/discharge	Grab
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Mo	XXX	XXX	XXX	XXX	1/month	Calculation
Total Suspended Solids (Total Load, lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Oil and Grease	XXX	XXX	XXX	15.0	XXX	30.0	2/discharge	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 022

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. HH. For Outfall 111

Receiving Waters: Crooked Creek Watershed

Type of Effluent: All discharges for implementation of TMDL requirements

1. The permittee is authorized to discharge during the period from **January 1, 2019** through **December 31, 2023**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Total Monthly	Total Annual	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Suspended Solids (Total Load, lbs) Special Effluent Gross	XXX	6,809,591	XXX	XXX	XXX	XXX	1/year	Calculation
Total Precipitation (in) Special Effluent Gross	Report	XXX	XXX	XXX	XXX	XXX	1/month	Recorded
Total Precipitation (in) Special Effluent Gross	XXX	Report	XXX	XXX	XXX	XXX	1/year	Recorded

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

N/A

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS (Continued)

Additional Requirements

See Condition VII in Part C of this permit for information pertaining to authorized storm water outfalls 005, 016, 017, 020, 023, 024, 025, 026, 027, and 028.

See Condition IX in Part C of this permit for requirements regarding the calculation of Total Flow and Total Load of Total Suspended Solids.

The permittee may not discharge:

1. Floating solids, scum, sheen or substances that result in observed deposits in the receiving water. (25 Pa Code § 92a.41(c))

2. Oil and grease in amounts that cause a film or sheen upon or discoloration of the waters of this Commonwealth or adjoining shoreline, or that exceed 15 mg/l as a daily average or 30 mg/l at any time (or lesser amounts if specified in this permit). (25 Pa. Code § 92a.47(a)(7), § 95.2(2))

3. Substances in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. (25 Pa Code § 93.6(a))

4. Foam or substances that produce an observed change in the color, taste, odor or turbidity of the receiving water, unless those conditions are otherwise controlled through effluent limitations or other requirements in this permit. For the purpose of determining compliance with this condition, DEP will compare conditions in the receiving water upstream of the discharge to conditions in the receiving water approximately 100 feet downstream of the discharge to determine if there is an observable change in the receiving water. (25 Pa Code § 92a.41(c))

Footnotes

(1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.

(2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

(3) Starting December 31, 2023, flue gas desulfurization (FGD) wastewater generated by the permittee shall not be discharged to surface waters unless the wastewater is treated to achieve the effluent limitation guidelines (ELGs) for Best Available Technology (BAT) at 40 CFR § 423.13(g)(1)(i). In the event the U.S. Environmental Protection Agency (EPA) publishes a rulemaking that modifies the ELGs at 40 CFR § 423.13(g)(1)(i) prior to December 31, 2023, the permittee shall achieve compliance with the modified ELGs as soon as possible but no later than the date established by federal regulations. If EPA publishes a rulemaking that rescinds or revokes the ELGs at 40 CFR § 423.13(g)(1)(i) prior to December 31, 2023, this provision is not applicable.

(4) The permittee shall cease the discharge of pollutants in bottom ash transport water generated after December 31, 2023, except where bottom ash transport water is used in an FGD scrubber. Bottom ash transport water generated prior to December 31, 2023 may be discharged if the limitations at 40 CFR § 423.12(b)(4) are met. The term bottom ash transport water means water carrying ash, including boiler slag, which settles in the furnace or is dislodged from furnace walls, to areas outside of the furnace. The term includes economizer ash when collected with bottom ash. In the event the U.S. Environmental Protection Agency (EPA) publishes a rulemaking that modifies the ELGs at 40 CFR § 423.13(k)(1)(i) prior to December 31, 2023, the permittee shall achieve compliance with the modified ELGs as soon as possible but no later than the date established by federal regulations. If EPA publishes a revised rulemaking that rescinds or revokes the ELGs at 40 CFR § 423.13(k)(1)(i) prior to December 31, 2023, this provision is not applicable.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS (Continued)

(5) If there are concurrent discharges from Internal Monitoring Points 101 and 201, then discharges at Outfall 001 shall be analyzed in accordance with the requirements specified in Part A of this permit at that outfall. Analyses at Outfall 001 during those circumstances are in addition to monitoring at IMPs 101 and 201. If Internal Monitoring Points 101 and 201 are not discharging concurrently, then monitoring at Outfall 001 is not required.

(6) Effluent at IMPs 203, 403, and 503 shall only be analyzed for Chromium and Zinc when Chromium and Zinc-based additives are added to the cooling water.

(7) Condition III in Part C of this permit identifies requirements pertaining to interim monitoring and final limits at Outfalls 003 and 014.

(8) Debris collected on the intake racks shall not be returned to the waterway.

(9) Condition X in Part C of this permit identifies requirements pertaining to interim monitoring and final limits for Dissolved Oxygen at Internal Monitoring Point 303.

(10) Condition XI in Part C of this permit identifies requirements pertaining to interim monitoring and final limits for Heat Rejection Rates in December at Outfall 003.

(11) Flows reported at Outfall 003 shall be measured at the existing weir when flows are equal to or below 15.6 million gallons per day (MGD), which represents the upper limit of the existing flow monitoring equipment and/or the maximum Crooked Creek Stream Gage Height (USGS Gaging Station 03038000 – Crooked Creek at Idaho, PA) of 5.14 feet (i.e., at an elevation of 965.6 ft). When these flow conditions are exceeded, flows reported at Outfall 003 shall be calculated by adding the flows measured at the following locations:

- Overflow spillway from the final settling pond (all flows through and across the spillway)
- IMP 703

Supplemental Information

The effluent limitations for Outfalls 001 (IMP 101), 006, 007, and 014 were determined using effluent discharge rates of 0.32 MGD, 0.014 MGD, 0.016 MGD, 0.1263 MGD, respectively.

II. DEFINITIONS

At Outfall (XXX) means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line (XXX), or where otherwise specified.

Average refers to the use of an arithmetic mean, unless otherwise specified in this permit. (40 CFR 122.41(l)(4)(iii))

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollutant loading to surface waters of the Commonwealth. The term also includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The term includes activities, facilities, measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim, and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities. (25 Pa. Code § 92a.2)

Bypass means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i))

Calendar Week is defined as the seven consecutive days from Sunday through Saturday, unless the permittee has been given permission by DEP to provide weekly data as Monday through Friday based on showing excellent performance of the facility and a history of compliance. In cases when the week falls in two separate months, the month with the most days in that week shall be the month for reporting.

Clean Water Act means the Federal Water Pollution Control Act, as amended. (33 U.S.C.A. §§ 1251 to 1387).

Chemical Additive means a chemical product (including products of disassociation and degradation, collectively "products") introduced into a waste stream that is used for cleaning, disinfecting, or maintenance and which may be detected in effluent discharged to waters of the Commonwealth. The term generally excludes chemicals used for neutralization of waste streams, the production of goods, and treatment of wastewater.

Composite Sample (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters (mL) each obtained at spaced time intervals during the compositing period. The composite must be flow-proportional; either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite. (EPA Form 2C)

Composite Sample (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). A separate analysis should be performed for each sample and the results should be averaged.

Daily Average Temperature means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (25 Pa. Code § 92a.2, 40 CFR 122.2)

Daily Maximum Discharge Limitation means the highest allowable "daily discharge."

Discharge Monitoring Report (DMR) means the DEP or EPA supplied form(s) for the reporting of self-monitoring results by the permittee. (25 Pa. Code § 92a.2, 40 CFR 122.2)

Estimated Flow means any method of liquid volume measurement based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.

Geometric Mean means the average of a set of n sample results given by the nth root of their product.

Grab Sample means an individual sample of at least 100 mL collected at a randomly selected time over a period not to exceed 15 minutes. (EPA Form 2C)

Hazardous Substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. (40 CFR 122.2)

Hauled-In Wastes means any waste that is introduced into a treatment facility through any method other than a direct connection to the wastewater collection system. The term includes wastes transported to and disposed of within the treatment facility or other entry points within the collection system.

Immersion Stabilization (i-s) means a calibrated device is immersed in the wastewater until the reading is stabilized.

Instantaneous Maximum Effluent Limitation means the highest allowable discharge of a concentration or mass of a substance at any one time as measured by a grab sample. (25 Pa. Code § 92a.2)

Measured Flow means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

Monthly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. (25 Pa. Code § 92a.2)

Municipal Waste means garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities; and sludge not meeting the definition of residual or hazardous waste under this section from a municipal, commercial or institutional water supply treatment plant, waste water treatment plant or air pollution control facility. (25 Pa. Code § 271.1)

Non-contact Cooling Water means water used to reduce temperature which does not come in direct contact with any raw material, intermediate product, waste product (other than heat), or finished product.

Residual Waste means garbage, refuse, other discarded material or other waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations and sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous. The term does not include coal refuse as defined in the Coal Refuse Disposal Control Act. The term does not include treatment sludges from coal mine drainage treatment plants, disposal of which is being carried on under and in compliance with a valid permit issued under the Clean Streams Law. (25 Pa Code § 287.1)

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that 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. (40 CFR 122.41(m)(1)(ii))

Stormwater means the runoff from precipitation, snow melt runoff, and surface runoff and drainage. (25 Pa. Code § 92a.2)

Stormwater Associated With Industrial Activity means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant, and as defined at 40 CFR 122.26(b)(14) (i) - (ix) & (xi) and 25 Pa. Code § 92a.2.

Total Dissolved Solids means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR Part 136.

Toxic Pollutant means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains may, on the basis of information available to DEP cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in these organisms or their offspring. (25 Pa. Code § 92a.2)

III. SELF-MONITORING, REPORTING AND RECORDKEEPING

A. Representative Sampling

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 CFR 122.41(j)(1)). Representative sampling includes the collection of samples, where possible, during periods of adverse weather, changes in treatment plant performance and changes in treatment plant loading. If possible, effluent samples must be collected where the effluent is well mixed near the center of the discharge conveyance and at the approximate mid-depth point, where the turbulence is at a maximum and the settlement of solids is minimized. (40 CFR 122.48, 25 Pa. Code § 92a.61)

2. Records Retention (40 CFR 122.41(j)(2))

   Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least 5 years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for 3 years from the date of the sample measurement, report or application, unless a longer retention period is required by the permit. The 3-year period shall be extended as requested by DEP or the EPA Regional Administrator.

3. Recording of Results (40 CFR 122.41(j)(3))

   For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

   a. The exact place, date and time of sampling or measurements.
   b. The person(s) who performed the sampling or measurements.
   c. The date(s) the analyses were performed.
   d. The person(s) who performed the analyses.
   e. The analytical techniques or methods used; and the associated detection level.
   f. The results of such analyses.

4. Test Procedures

   a. Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§ 4101-4113) and 25 Pa. Code Chapter 252, relating to environmental laboratory accreditation.

   b. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be those approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, unless the method is specified in this permit or has been otherwise approved in writing by DEP. (40 CFR 122.41(j)(4), 122.44(i)(1)(iv))

   c. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be sufficiently sensitive. A method is sufficiently sensitive when 1) the method minimum level is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or 2) the method has the lowest minimum level of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, for the measured pollutant or pollutant parameter; or 3) the method is specified in this permit or has been otherwise approved in writing by DEP for the measured pollutant or pollutant parameter. Permittees have the option of providing matrix or sample-specific minimum levels rather than the published levels. (40 CFR 122.44(i)(1)(iv))

5. Quality/Assurance/Control

In an effort to assure accurate self-monitoring analyses results:

a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA. (40 CFR 122.41(e), 122.41(i)(3))

b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136. (40 CFR 122.41(j)(4))

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.44, 92a.61(i) and 40 CFR §§ 122.41(e), 122.44(i)(1))

2. The permittee shall use DEP's electronic Discharge Monitoring Report (eDMR) system to report the results of compliance monitoring under this permit (see www.dep.pa.gov/edmr). Permittees that are not using the eDMR system as of the effective date of this permit shall submit the necessary registration and trading partner agreement forms to DEP's Bureau of Clean Water (BCW) within 30 days of the effective date of this permit and begin using the eDMR system when notified by DEP BCW to do so. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.61(g) and 40 CFR § 122.41(l)(4))

3. Submission of a physical (paper) copy of a Discharge Monitoring Report (DMR) is acceptable under the following circumstances:

a. For a permittee that is not yet using the eDMR system, the permittee shall submit a physical copy of a DMR to the DEP regional office that issued the permit during the interim period between the submission of registration and trading partner agreement forms to DEP and DEP's notification to begin using the eDMR system.

b. For any permittee, as a contingency a physical DMR may be mailed to the DEP regional office that issued the permit if there are technological malfunction(s) that prevent the successful submission of a DMR through the eDMR system. In such situations, the permittee shall submit the DMR through the eDMR system within 5 days following remedy of the malfunction(s).

4. DMRs must be completed in accordance with DEP's published DMR instructions (3800-FM-BCW0463). DMRs must be received by DEP no later than 28 days following the end of the monitoring period. DMRs are based on calendar reporting periods and must be received by DEP in accordance with the following schedule:

- Monthly DMRs must be received within 28 days following the end of each calendar month.
- Quarterly DMRs must be received within 28 days following the end of each calendar quarter, i.e., January 28, April 28, July 28, and October 28.
- Semiannual DMRs must be received within 28 days following the end of each calendar semiannual period, i.e., January 28 and July 28.
- Annual DMRs must be received by January 28, unless Part C of this permit requires otherwise.

5. The permittee shall complete all Supplemental Reporting forms (Supplemental DMRs) attached to this permit, or an approved equivalent, and submit the signed, completed forms as attachments to the DMR, through DEP's eDMR system. DEP's Supplemental Laboratory Accreditation Form (3800-FM-BCW0189) must be completed and submitted to DEP with the first DMR following issuance of this permit, and anytime thereafter when changes to laboratories or methods occur. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.61(g) and 40 CFR § 122.41(l)(4))

6. The completed DMR Form shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92a.22:

- For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
- For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
- For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

If signed by a person other than the above and for co-permittees, written notification of delegation of DMR signatory authority must be submitted to DEP in advance of or along with the relevant DMR form. (40 CFR § 122.22(b))

7. If the permittee monitors any pollutant at monitoring points as designated by this permit, using analytical methods described in Part A III.A.4. herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR. (40 CFR 122.41(l)(4)(ii))

C. Reporting Requirements

1. Planned Changes to Physical Facilities – The permittee shall give notice to DEP as soon as possible but no later than 30 days prior to planned physical alterations or additions to the permitted facility. A permit under 25 Pa. Code Chapter 91 may be required for these situations prior to implementing the planned changes. A permit application, or other written submission to DEP, can be used to satisfy the notification requirements of this section.

   Notice is required when:

   a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b). (40 CFR 122.41(l)(1)(i))

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this permit. (40 CFR 122.41(l)(1)(ii))

   c. 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. (40 CFR 122.41(l)(1)(iii))

   d. The planned change may result in noncompliance with permit requirements. (40 CFR 122.41(l)(2))

2. Planned Changes to Waste Stream – Under the authority of 25 Pa. Code § 92a.24(a), the permittee shall provide notice to DEP as soon as possible but no later than 45 days prior to any planned changes in the volume or pollutant concentration of its influent waste stream, as specified in paragraphs 2.a. and 2.b., below. Notice shall be provided on the “Planned Changes to Waste Stream” Supplemental Report (3800-FM-BCW0482), available on DEP’s website. The permittee shall provide information on the quality and quantity of waste introduced into the facility, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the facility. The Report shall be sent via Certified Mail or other means to confirm DEP’s receipt of the notification. DEP will determine if the submission of a new application and receipt of a new or amended permit is required.

   a. Introduction of New Pollutants (25 Pa. Code § 92a.24(a))

      New pollutants are defined as parameters that meet all of the following criteria:

      (i) Were not detected in the facilities’ influent waste stream as reported in the permit application; and

(ii) Have not been approved to be included in the permittee's influent waste stream by DEP in writing.

The permittee shall provide notification of the introduction of new pollutants in accordance with paragraph 2 above. The permittee may not authorize the introduction of new pollutants until the permittee receives DEP's written approval.

b. Increased Loading of Approved Pollutants (25 Pa. Code § 92a.24(a))

Approved pollutants are defined as parameters that meet one or more of the following criteria:

(i) Were detected in the facilities' influent waste stream as reported in the permittee's permit application; or

(ii) Have been approved to be included in the permittee's influent waste stream by DEP in writing; or

(iii) Have an effluent limitation or monitoring requirement in this permit.

The permittee shall provide notification of the introduction of increased influent loading (lbs/day) of approved pollutants in accordance with paragraph 2 above when (1) the cumulative increase in influent loading (lbs/day) exceeds 20% of the maximum loading reported in the permit application, or a loading previously approved by DEP, or (2) may cause an exceedance in the effluent of Effluent Limitation Guidelines (ELGs) or limitations in Part A of this permit, or (3) may cause interference or pass through at the facility, or (4) may cause exceedances of the applicable water quality standards in the receiving stream. Unless specified otherwise in this permit, if DEP does not respond to the notification within 30 days of its receipt, the permittee may proceed with the increase in loading. The acceptance of increased loading of approved pollutants may not result in an exceedance of ELGs or effluent limitations and may not cause exceedances of the applicable water quality standards in the receiving stream.

3. Reporting Requirements for Hauled-In Wastes

a. Receipt of Residual Waste

(i) The permittee shall document the receipt of all hauled-in residual wastes (including but not limited to wastewater from oil and gas wells, food processing waste, and landfill leachate), as defined at 25 Pa. Code § 287.1, that are received for processing at the treatment facility. The permittee shall report hauled-in residual wastes on a monthly basis to DEP on the "Hauled In Residual Wastes" Supplemental Report (3800-FM-BCW0450) as an attachment to the DMR. If no residual wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report. The information used to develop the Report shall be retained by the permittee for five years from the date of receipt and must be made available to DEP or EPA upon request.

(1) The dates that residual wastes were received.

(2) The volume (gallons) of wastes received.

(3) The license plate number of the vehicle transporting the waste to the treatment facility.

(4) The permit number(s) of the well(s) where residual wastes were generated, if applicable.

(5) The name and address of the generator of the residual wastes.

(6) The type of wastewater.

The transporter of residual waste must maintain these and other records as part of the daily operational record (25 Pa. Code § 299.219). If the transporter is unable to provide this information or the permittee has not otherwise received the information from the generator, the residual wastes shall not be accepted by the permittee until such time as the permittee receives such information from the transporter or generator.

(ii) The following conditions apply to the characterization of residual wastes received by the permittee:

(1) If the generator is required to complete a chemical analysis of residual wastes in accordance with 25 Pa. Code § 287.51, the permittee must receive and maintain on file a chemical analysis of the residual wastes it receives. The chemical analysis must conform to the Bureau of Waste Management's Form 26R except as noted in paragraph (2), below. Each load of residual waste received must be covered by a chemical analysis if the generator is required to complete it.

(2) For wastewater generated from hydraulic fracturing operations ("frac wastewater") within the first 30 production days of a well site, the chemical analysis may be a general frac wastewater characterization approved by DEP. Thereafter, the chemical analysis must be waste-specific and be reported on the Form 26R.

b. Receipt of Municipal Waste

(i) The permittee shall document the receipt of all hauled-in municipal wastes (including but not limited to septage and liquid sewage sludge), as defined at 25 Pa. Code § 271.1, that are received for processing at the treatment facility. The permittee shall report hauled-in municipal wastes on a monthly basis to DEP on the "Hauled In Municipal Wastes" Supplemental Report (3800-FM-BCW0437) as an attachment to the DMR. If no municipal wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report:

(1) The dates that municipal wastes were received.

(2) The volume (gallons) of wastes received.

(3) The BOD_5 concentration (mg/l) and load (lbs) for the wastes received.

(4) The location(s) where wastes were disposed of within the treatment facility.

(ii) Sampling and analysis of hauled-in municipal wastes must be completed to characterize the organic strength of the wastes, unless composite sampling of influent wastewater is performed at a location downstream of the point of entry for the wastes.

4. Unanticipated Noncompliance or Potential Pollution Reporting

a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code §§ 91.33 and 92a.41(b).

(i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.

(ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.

(iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l)(6). These requirements include the following obligations:

(i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; and

(3) Violation of the maximum daily discharge limitation for any of the pollutants listed in the permit as being subject to the 24-hour reporting requirement. (40 CFR 122.44(g))

(ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. 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.

(iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (40 CFR 122.41(l)(6)(iii))

5. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph C.4 of this section or specific requirements of compliance schedules, at the time DMRs are submitted, on the Non-Compliance Reporting Form (3800-FM-BCW0440). The reports shall contain the information listed in paragraph C.4.b.(ii) of this section. (40 CFR 122.41(l)(7))

D. Specific Toxic Pollutant Notification Levels (for Manufacturing, Commercial, Mining, and Silvicultural Direct Dischargers) - The permittee shall notify DEP as soon as it knows or has reason to believe the following: (40 CFR 122.42(a))

1. That any activity has occurred, or will occur, which would result in the discharge of any toxic pollutant which is not limited in this permit, if that discharge on a routine or frequent basis will exceed the highest of the following "notification levels": (40 CFR 122.42(a)(1))

a. One hundred micrograms per liter.

b. Two hundred micrograms per liter for acrolein and acrylonitrile.

c. Five hundred micrograms per liter for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol.

d. One milligram per liter for antimony.

e. Five times the maximum concentration value reported for that pollutant in this permit application.

f. Any other notification level established by DEP.

2. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels": (40 CFR 122.42(a)(2))

a. Five hundred micrograms per liter.

b. One milligram per liter for antimony.

c. Ten times the maximum concentration value reported for that pollutant in the permit application.

d. Any other notification level established by DEP.

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance

1. The permittee shall comply with all conditions of this permit. If a compliance schedule has been established in this permit, the permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit. (40 CFR 122.41(a)(1))

2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline. (25 Pa. Code § 92a.51(c), 40 CFR 122.47(a)(4))

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with 25 Pa. Code § 92a.72 and 40 CFR 122.41(f).

2. 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. (40 CFR 122.41(f))

3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions. (40 CFR 122.41(a)(1))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. (40 CFR 122.41(h))

2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit. (40 CFR 122.41(h))

3. 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 DEP, it shall promptly submit the correct and complete facts or information. (40 CFR 122.41(l)(8))

D. 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 terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e))

E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge, sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d))

F. Bypassing

1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a 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 in paragraphs two, three and four of this section. (40 CFR 122.41(m)(2))

2. Other Bypassing - In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:

   a. A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage." (40 CFR 122.41(m)(4)(i)(A))

   b. There are 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 backup 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. (40 CFR 122.41(m)(4)(i)(B))

   c. The permittee submitted the necessary notice required in F.4.a. and b. below. (40 CFR 122.41(m)(4)(i)(C))

3. DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in F.2. above. (40 CFR 122.41(m)(4)(ii))

4. Notice

   a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass. (40 CFR 122.41(m)(3)(i))

   b. Unanticipated Bypass – The permittee shall submit oral notice of any other unanticipated bypass within 24 hours, regardless of whether the bypass may endanger health or the environment or whether the bypass exceeds effluent limitations. The notice shall be in accordance with Part A III.C.4.b.

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR 122.41(a)(2).

Any person or municipality, who violates any provision of this permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or

- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 18 Pa.C.S.A § 4904 and 40 CFR 122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603 or 605 of the Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the Clean Water Act and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the 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. (40 CFR 122.41(c))

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and Title 25 Pa. Code Chapter 92a and 40 CFR 122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; (40 CFR 122.41(i)(1))

2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; (40 CFR 122.41(i)(2))

3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and (40 CFR 122.41(i)(3))

4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (40 CFR 122.41(i)(4))

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (40 CFR 122.61(a))

2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (40 CFR 122.61(b)(1))

   b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; (40 CFR 122.61(b)(2))

   c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section; and (40 CFR 122.61(b)(3))

d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code § 92a.51 (relating to schedules of compliance) and other appropriate DEP regulations. (25 Pa. Code § 92a.71)

3. In the event DEP does not approve transfer of this permit, the new owner or operator must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 122.41(g))

D. 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. (40 CFR 122.41(b))

E. Other Laws

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

IV. ANNUAL FEES

Permittees shall pay an annual fee in accordance with 25 Pa. Code § 92a.62. Annual fee amounts are specified in the following schedule and are due on each anniversary of the effective date of the most recent new or reissued permit. All flows identified in the schedule are annual average design flows. (25 Pa. Code § 92a. 62)

Minor IW Facility without ELG (Effluent Limitation Guideline)	$500
Minor IW Facility with ELG	$1,500
Major IW Facility < 250 MGD (million gallons per day)	$5,000
Major IW Facility ≥ 250 MGD	$25,000
IW Stormwater Individual Permit	$1,000
CAAP (Concentrated Aquatic Animal Production Facility)	$0

As of the effective date of this permit, the facility covered by the permit is classified in the following fee category: **Major IW Facility <250 MGD**.

Invoices for annual fees will be mailed to permittees approximately three months prior to the due date. In the event that an invoice is not received, the permittee is nonetheless responsible for payment. Throughout a five year permit term, permittees will pay four annual fees followed by a permit renewal application fee in the last year of permit coverage. Permittees may contact DEP at 717-787-6744 with questions related to annual fees. The fees identified above are subject to change in accordance with 25 Pa. Code § 92a.62(e).

Payment for annual fees shall be remitted to DEP at the address below by the anniversary date. Checks should be made payable to the Commonwealth of Pennsylvania.

PA Department of Environmental Protection
Bureau of Clean Water
Re: Chapter 92a Annual Fee
P.O. Box 8466
Harrisburg, PA 17105-8466

PART C

I. OTHER REQUIREMENTS

A. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance or replacement of all structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.

B. Collected screenings, slurries, sludges, and other solids shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land application, composting, processing, and storage of residual waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste, requirements for generators and transporters, and hazardous waste permit programs), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments. Screenings collected at intake structures shall be collected and managed and not be returned to the receiving waters.

The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport and disposal of solid waste materials generated as a result of wastewater treatment.

C. Collected screenings, slurries, sludges, and other solids shall be handled and disposed of in compliance with 25 Pa. Code, Chapters 75, and in a manner equivalent to the requirements indicated in Chapters 271, 273, 275, 283, and 285 (related to permits and requirements for landfilling, land application, incineration, and storage of sewage sludge), Federal Regulation 40 CFR 257, Pennsylvania Clean Streams Law, Pennsylvania Solid Waste Management Act of 1980, and the Federal Clean Water Act and its amendments. The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport, and disposal of solid waste materials generated as a result of wastewater treatment.

D. If, after the issuance of this permit, DEP approves a municipal sewage facilities official plan or an amendment to an official plan under Act 537 (Pennsylvania Sewage Facilities Act, the Act of January 24, 1966, P.L. 1535 as amended) in which sewage from the herein approved facilities will be treated and disposed of at other planned facilities, the permittee shall, upon notification from the municipality or DEP, provide for the conveyance of its sewage to the planned facilities, abandon use and decommission the herein approved facilities including the proper disposal of solids, and notify DEP accordingly. The permittee shall adhere to schedules in the approved official plan, amendments to the plan, or other agreements between the permittee and municipality. This permit shall then, upon notice from DEP, terminate and become null and void and shall be relinquished to DEP.

E. The terms and conditions of Water Quality Management (WQM) permits that may have been issued to the permittee relating to discharge requirements are superseded by this NPDES permit unless otherwise stated herein.

F. If the applicable standard or effluent guideline limitation relating to the application for Best Available Technology (BAT) Economically Achievable or to Best Conventional Technology (BCT) is developed by DEP or EPA for this type of industry, and if such standard or limitation is more stringent than the corresponding limitations of this permit (or if it controls pollutants not covered by this permit), DEP may modify or revoke and reissue the permit to conform with that standard or limitation.

G. The permittee shall optimize chlorine dosages used for disinfection or other purposes to minimize the concentration of Total Residual Chlorine (TRC) in the effluent, meet applicable effluent limitations, and reduce the possibility of adversely affecting the receiving waters. Optimization efforts may include an evaluation of wastewater characteristics, mixing characteristics, and contact times, adjustments to process controls, and maintenance of the disinfection facilities. If DEP determines that effluent TRC is causing adverse water quality impacts, DEP may reopen this permit to apply new or more stringent effluent limitations and/or require implementation of control measures or operational practices to eliminate such impacts.

Where the permittee does not use chlorine for primary or backup disinfection, but proposes the use of chlorine for cleaning or other purposes, the permittee shall notify DEP prior to initiating use of chlorine and monitor TRC concentrations in the effluent on each day in which chlorine is used. The results shall be submitted as an attachment to the DMR.

H. Temperature

This discharge shall not cause a change in the stream temperature of more than 2°F during any one hour.

I. Chlorine or other approved biocides may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrates to the permitting authority that discharges for more than two hours are required for macroinvertebrate control. Simultaneous multi-unit chlorination/biocide application is permitted.

J. There shall be no net addition of pollutants to non-contact cooling water over intake values except for heat and water conditioning additives for which complete information was submitted in the application or is required to be submitted as a condition of this permit.

K. There shall be no discharge of polychlorinated biphenyl (PCB) compounds such as those commonly used for transformer fluid at any time.

L. Cooling tower blowdown discharges shall contain no detectable amounts of the 126 Priority Pollutants listed in 40 CFR Part 423, Appendix A, that are contained in chemicals added for cooling tower maintenance, except for Total Chromium and Total Zinc. When requested by DEP, the permittee shall conduct monitoring or submit engineering calculations to demonstrate compliance with 40 CFR 423.13(d)(1).

M. The maximum daily Free Available Chlorine limitations as it relates to chlorinated discharges means the average of analyses made over a single period of chlorine release which does not exceed two hours.

N. The permittee shall monitor the influent and effluent (in conjunction with the requirements of Part A of the permit) at Internal Monitoring Point 703 to the wetlands treatment system to determine the effectiveness of the system. Influent sampling and monitoring shall coincide with the effluent sampling requirements in Part A of this permit (Iron, Manganese, Total Suspended Solids, pH). Effluent flow shall also be monitored.

The permittee shall implement the following in order to achieve a goal of 2.0 mg/L (average) and 4.0 mg/L (maximum) concentration of Manganese in the effluent.

1. Increase the cell depth in Cells 1, 2, and 3
2. Maintain limestone addition, and
3. Any other minor modification (operational in nature) that will allow the permittee to achieve the Manganese goals.

At the end of each year, the permittee shall describe the measures that were implemented and their effectiveness in meeting the discharge limitations and goals. The report shall identify any additional measures that will be put into effect.

O. The permittee shall use either EPA Test Method 1631 or 245.7 for mercury analyses. Methods 1631 and 245.7 allow for the determination of mercury at levels of 0.5 parts per trillion and 5.0 parts per trillion, respectively.

II. SOLIDS MANAGEMENT

A. The permittee shall manage and properly dispose of sewage sludge and/or biosolids by performing sludge wasting that maintains an appropriate mass balance of solids within the treatment system. The wasting rate must be developed and implemented considering the specific treatment process type, system loadings, and seasonal variation while maintaining compliance with effluent limitations. Holding excess sludge within clarifiers or in the disinfection process is not permissible.

B. The permittee shall submit the Supplemental Reports entitled, "Supplemental Report – Sewage Sludge/Biosolids Production and Disposal" (Form No. 3800-FM-BCW0438) and "Supplemental Report – Influent & Process Control" (Form No. 3800-FM-BCW0436), as attachments to the DMR on a monthly basis. When applicable, the permittee shall submit the Supplemental Reports entitled, "Supplemental Report – Hauled In Municipal Wastes" (Form No. 3800-FM-BCW0437) and "Supplemental Report – Hauled In Residual Wastes" (Form No. 3800-FM-BCW0450), as attachments to the DMR.

III. TOXICS REDUCTION EVALUATION (TRE)

A. Water Quality Based Effluent Limitations (WQBELs)

1. Based on the discharge and stream data currently available to DEP, the WQBELs for total thallium at Outfall 003 in Part A.I.P of this permit and WQBELs for total iron and total manganese at Outfall 014 in Part A.I.DD of this permit are necessary to protect the receiving stream uses designated in the DEP's Rules and Regulations.

2. Within 60 days following the permit effective date (PED), the permittee must submit notification to DEP verifying that one of the following options has been selected.

   a. The permittee accepts DEP's data, assumptions and water quality modeling which was the basis for the WQBELs and will not proceed with the optional site-specific data collection activities described in Section C of this condition. The WQBELs will be considered final and enforceable three years after the PED and should be used as the basis for Phase II of the TRE.

   b. During the period following permit issuance, and prior to the WQBELs becoming final, the permittee agrees to conduct site-specific discharge and/or stream data collection and provide DEP with data to verify or refine the WQBELs in accordance with the schedule in Section B.2, herein. If warranted, modified WQBELs will be established through a permit amendment. Any such permit amendment shall be considered a formal permitting action of DEP subject to applicable permit modification procedures.

   If the permittee fails to select one of these options within 60 days of permit effective date, option A.2.a. is selected by default. If the permittee selects option A.2.b, and conducts TRE actions within the schedule in Section B.2 of this condition of the permit, herein, DEP will issue a written decision by letter or permit amendment. The permittee will have 30 days from the date of receipt of the written decision to file an appeal of the final WQBELs.

3. In either case, the permittee must conduct a TRE as outlined below. Phase I of the TRE has both required and optional components.

B. TRE Submission Requirements

1. The TRE shall be developed to:

   a. Confirm and quantify the presence of the pollutants in the discharge with WQBELs.

   b. Verify or refine the modeling data and/or assumptions used to develop the WQBELs.

   c. Identify sources of the pollutants with final WQBELs.

   d. Recommend management practices, wastewater treatment technologies, or other control techniques to reduce or eliminate these pollutants.

2. The TRE and associated reports shall be completed and submitted in accordance with the following schedule:

   a. Submit notification specified in A.2 above Within 60 days of PED

b.	Submit work plan for conducting Phase I	Within 90 days of PED
c.	Start Phase 1	Within 120 days of PED
d.	Submit complete Phase I report (3 copies)	Within 18 months of PED
e.	Start Phase II	Within 30 days of notice from DEP to proceed with Phase II
f.	Submit complete Phase II report	Within 180 days of notice to proceed with Phase II
g.	Progress reports	Every three months starting 120 days after PED

C. Phase I TRE Requirements

1. The Phase I TRE shall consist of the following components, at a minimum:

   a. Influent and effluent quality review;

   b. Source inventory and evaluation;

   c. Source reduction evaluation; and

   d. Implementation of pollution prevention, sound housekeeping practices, and other management practices.

2. The permittee selecting option A.2.b above has the option of providing all or some of the following site-specific data as part of Phase I for use in verifying and refining the WQBELs:

   - Discharge hardness
   - Discharge pollutant concentration and variability
   - Design discharge flow
   - Discharge mixing characteristics
   - Pollutant fate characteristics
   - Stream width, depth and slope
   - Stream velocity
   - Ambient stream data for pollutants, pH, temperature
   - Instream hardness
   - Water intake quality and quantity
   - Treatment plant influent pollutant concentrations
   - Chemical translators
   - Water Effects Ratio (WER)

   The permittee should contact DEP for guidance in determining which of the above data will have a significant impact on the WQBELs and also for protocols on collecting and submitting the data. DEP will determine the adequacy of any site-specific data submitted and advise the permittee accordingly. If initial review of the submitted data suggests that additional data collection is necessary, DEP will so advise the permittee. DEP will notify the permittee what effect, if any, the data have on the WQBELs using the procedure outlined in A.2 above.

3. Site-Specific Criteria

   The permittee may request an opportunity to demonstrate alternative, site-specific criteria for these pollutants. The procedures for carrying out such demonstrations must receive written approval in advance by DEP and must be in accordance with the requirements of Section 93.8 of DEP's Rules and Regulations.

If the permittee chooses this option, requests for alternative, site-specific criteria must be submitted to DEP as part of the Phase I TRE report. Where the demonstration results in more stringent limitations than those previously established by DEP, the more stringent limitation will apply. Any less stringent limitations which are approved by DEP shall not violate any other applicable water criteria.

4. Alternative Site-Specific Method Detection Limits (MDL)

In some cases, the WQBEL may be less than the Method Detection Level (MDL) in 25 Pa. Code, Chapter 16. In this event, the permittee has the option to demonstrate alternative, facility-specific MDLs to account for analytical matrix interference associated with the wastewater in question. The procedures for determining MDLs, published as Appendix B in 40 CFR Part 136, must be followed and complete documentation provided. The request for approval of alternative facility-specific MDLs including all documentation required to support such a request must be submitted to DEP with the Phase I TRE report.

DEP may grant a facility-specific MDL by including the numeric alternate MDL value for compliance purposes through the permit modification or renewal process.

D. Phase II TRE Requirements

The permittee should not proceed with Phase II until notified by DEP to do so. Depending on the results of Phase I, the WQBELs may need to be modified or Phase II may not be necessary.

1. Source Reduction Evaluation

In addition to those items in C.1 above, as part of Phase II, the permittee must conduct source reduction evaluations including recycle, reuse, and process/chemical substitution. The intent of this portion of the TRE is to investigate and implement all low-cost, non-structural alternatives to reduce pollutants.

2. Final WQBEL Compliance Strategies and Schedule

A complete TRE report must consist of identification and assessment of all available pollution control options (Best Management Practices and/or treatment technologies and other structural alternatives) and their ability to comply with the final WQBELs or other WQBELs identified in response to Phase I. The permittee must select a specific pollution control option that will achieve the applicable WQBELs and specify a schedule for the implementation of this option.

3. Section 95.4 Time Extension Request

In some cases, the final WQBEL may not be technologically achievable using any combination of control options. In this event, the permittee has the option of requesting an extension under the requirements contained in 25 Pa Code, Section 95.4 of DEP's Rules and Regulations. If the permittee elects to submit the 95.4 time extension request, the request must be submitted with Phase II of the TRE report. Form 3800-FM-BCW0302 should be used for any such requests.

IV. WQBELs BELOW QUANTITATION LIMITS

A. The parameter(s) listed below are subject to water quality-based effluent limits (WQBELs) in Part A of this permit that are necessary to comply with state water quality standards, but may be less than quantitation limits (QLs), as defined in 25 Pa. Code § 252.1, that are generally achievable by conventional analytical technology. The permittee shall analyze the parameter(s) using methods that will achieve the QL(s) as listed below. For the purpose of compliance, a statistical value reported on the DMR that is less than the QL(s) (i.e., “non-detect”) will be considered to be in compliance.

Parameter Name	Quantitation Limit
Thallium, Total	2.0 µg/L

B. The permittee shall, where determined to be feasible by the permittee, achieve a QL less than the QL identified above to improve the level of confidence that state water quality standards are being met in the receiving waters.

C. The permittee shall manage non-detect values and report statistical results to DEP in accordance with published DMR guidance (3800-BK-DEP3047 and 3800-FS-DEP4262). Where a mixed data set exists containing non-detect results and "detected" values (i.e., results greater than or equal to the QL), the QL shall be used for non-detect results to compute average statistical results.

V. CHEMICAL ADDITIVES

A. Approved Chemical Additives List

1. The permittee is authorized to use chemical additives that are published on DEP's Approved Chemical Additives List (Approved List) (see www.dep.pa.gov/chemicaladditives) subject to paragraphs A.2 and A.3, below.

2. The permittee may not discharge a chemical additive at a concentration that is greater than the water quality-based effluent limitation (WQBEL) for the chemical additive or, if applicable, a technology-based effluent limitation. If effluent limitations are not specified in Part A of this permit for the chemical additive, the permittee is responsible for determining the WQBEL and ensuring the WQBEL is not exceeded by restricting usage to an amount that will not cause an excursion above in-stream water quality standards.

3. If the permittee decides to use a chemical additive that is on DEP's Approved List and the use would either (1) constitute an increase in the usage rate specified in the NPDES permit application or previous notification to DEP or (2) constitute a new use, not identified in the NPDES permit application or otherwise no previous notification occurred, the permittee shall complete and submit the "Chemical Additives Notification Form" (3800-FM-BCW0487) to the DEP regional office that issued the permit. The permittee may proceed to use the chemical additive as reported on the Form upon receipt by the DEP regional office.

B. New Chemical Additives, Not on Approved Chemical Additives List

1. In the event the permittee wishes to use a chemical additive that is not listed on DEP's Approved List, the permittee shall submit the "New Chemical Additives Request Form" (3800-FM-BCW0486) to DEP's Central Office, Bureau of Clean Water (BCW), NPDES Permitting Division, Rachel Carson State Office Building, PO Box 8774, Harrisburg, PA 17105-8774, prior to use. A copy shall be submitted to the DEP regional office that issued the permit. The form must be completed in whole in order for BCW to approve the chemical additive, and a Material Safety Data Sheet (MSDS) that meets the minimum requirements of 29 CFR 1910.1200(g) must be attached.

2. Following placement of the chemical additive on the Approved List, the permittee may submit the Chemical Additive Notification Form in accordance with paragraph A.3, above, to notify DEP of the intent to use the approved chemical additive. The permittee may proceed with usage when the new chemical has been identified on DEP's Approved List and following DEP's receipt of the Chemical Additives Notification Form.

3. The permittee shall restrict usage of chemical additives to the maximum usage rates determined and reported to DEP on Chemical Additives Notification Forms.

C. Chemical Additives Usage Reporting Requirements

The "Chemical Additives Usage Form" (3800-FM-BCW0439) shall be used to report the usage of chemical additives and shall be submitted as an attachment to the Discharge Monitoring Report (DMR) at the time the DMR is submitted.

D. DEP may amend this permit to include WQBELs or otherwise control usage rates of chemical additives if there is evidence that usage is adversely affecting receiving waters, producing Whole Effluent Toxicity test failures, or is causing excursions of in-stream water quality standards.

VI. HEAT REJECTION RATE LIMITATIONS

A. To comply with the Heat Rejection Rate limitations and monitoring requirements for Outfall 001, the permittee shall monitor the following parameters:

Parameter	Units	Monitoring Location
Average Daily Discharge, Q_d	MGD	Outfall 003
Average Daily Plant Intake Temperature, T_1	°F	at the Crooked Creek Intake
Average Daily Effluent Temperature, T_d	°F	Outfall 003

B. For reporting purposes, the permittee shall perform the following calculation:

$Q_d \times 8.34 (T_d - T_1)$ = actual Heat Rejection Rate in million BTUs/day (MBTUs/day)

C. Report the daily Heat Rejection Rate on the Daily Effluent Monitoring supplemental form, and the average monthly and maximum daily Heat Rejection Rates recorded during the reporting period on the DMR.

VII. REQUIREMENTS APPLICABLE TO STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES

A. The permittee is authorized to discharge non-polluting stormwater from its site, alone or in combination with other wastewaters, through the following outfalls:

Outfall No.	Area Drained (ac)	Latitude	Longitude	Description
005	17	40° 39’ 42.00”	-79° 20’ 5.00”	Storm water from undeveloped property north and east of plant yard drains
006	12	40° 39’ 33.00”	-79° 20’ 14.00”	Strom water runoff from vegetated area adjacent to Cooling Towers 2A & 2B
007	17	40° 39’ 59.00”	-79° 20’ 5.00”	Storm water runoff
016	12	40° 40’ 8.00”	-79° 20’ 24.00”	Storm water runoff from southeast diversion culvert at the West Valley Disposal Site
017	34	40° 40’ 8.00”	-79° 20’ 24.00”	Storm water runoff from southwest diversion culvert at the West Valley Disposal Site
020	20	40° 40’ 36.00”	-79° 20’ 35.00”	Storm water runoff from principal and emergency spillways at the West Valley Disposal Site
023	27	40° 39’ 54.00”	-79° 20’ 1.00”	Railroad track drainage
024	7	40° 40’ 19.00”	-79° 19’ 47.00”	Storm water drainage from undeveloped hillside
025	7	40° 39’ 41.00”	-79° 20’ 53.00”	Northern storm water drainage channel from grassy plant perimeter east of Final Settling Basin
026	8	40° 39’ 38.00”	-79° 20’ 54.00”	Middle storm water drainage channel from grassy plant perimeter east of Final Settling Basin
027	14	40° 39’ 30.00”	-79° 20’ 54.00”	Southern storm water drainage channel from grassy plant perimeter east of Final Settling Basin
028	3	40° 39’ 19.00”	-79° 20’ 23.00”	Grassy swale near the western boundary of FirstEnergy substation

Monitoring requirements and effluent limitations for these outfalls are specified in Part A of this permit, if applicable.

B. Stormwater Annual Report.

The permittee shall submit a complete Annual Report to the DEP office that issued the permit by May 1 each year using DEP's Annual Report template, attached to this permit. The Annual Report shall address activities under the permit for the previous calendar year. The permittee shall submit the Annual Report electronically if notified by DEP in writing. If the permittee discharges to a municipal separate storm sewer system (MS4), a copy of the Annual Report shall be submitted to the operator of the MS4.

C. Best Management Practices (BMPs).

The permittee shall implement and, as necessary, maintain the following BMPs to remain in compliance with this permit.

1. Pollution Prevention and Exposure Minimization.

The permittee shall minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff in order to minimize pollutant discharges by either locating industrial materials and activities inside or protecting them with storm resistant coverings wherever feasible. The permittee shall implement and maintain the following measures, at a minimum:

a. Use grading, berming or curbing to prevent runoff of polluted stormwater and divert run-on away from areas that contain polluted stormwater

b. Locate materials, equipment, and activities so that potential leaks and spills are contained or able to be contained or diverted before discharge to surface waters

c. Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants to surface waters

d. Store leaky vehicles and equipment indoors or, if stored outdoors, use drip pans and absorbents to prevent the release of pollutants to the environment.

e. Use spill/overflow protection equipment.

f. Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray.

g. Drain fluids from equipment and vehicles that will be decommissioned, and, for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks.

h. Keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids, ensure that discharges have a control (e.g., secondary containment, treatment). This General Permit does not authorize dry weather discharges from dumpsters or roll off boxes.

i. Minimize contamination of stormwater runoff from fueling areas by implementing the following BMPs where determined to be feasible: cover fueling areas; install oil/water separators or oil and grease traps in fueling area storm drains; use berms to prevent run-on to and runoff from fueling areas; use spill/overflow protection and cleanup equipment; use dry cleanup methods; and/or treat and/or recycle collected stormwater runoff.

j. Train employees routinely (no less than annually) on pollution prevention practices as contained in the PPC Plan.

2. Good Housekeeping.

The permittee shall perform good housekeeping measures in order to minimize pollutant discharges including the routine implementation of the following measures, at a minimum:

a. Implement a routine cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust or debris may accumulate to minimize the discharge of pollutants in stormwater. The cleaning and maintenance program must encompass, as appropriate, areas where material loading and unloading, storage, handling and processing occur.

b. Store materials in appropriate containers.

c. Minimize the potential for waste, garbage and floatable debris to be discharged by keeping exposed areas free of such materials, or by intercepting them before they are discharged.

d. Eliminate floor drain connections to storm sewers.

e. Use drip pans, drain boards, and drying racks to direct drips back into a fluid holding tank for reuse. Drain fluids from all equipment and parts prior to disposal. Promptly transfer used fluids to the proper container; do not leave full drip pans or other open containers around the shop. Empty and clean drip pans and containers.

f. Label and track the recycling of waste material (e.g., used oil, spent solvents, batteries).

g. Prohibit the practice of hosing down an area where the practice would result in the discharge of pollutants to a municipal or other storm water collection system that conveys pollutants off-site without proper treatment.

3. Erosion and Sediment Controls.

a. The permittee shall minimize erosion and pollutant discharges by stabilizing exposed soils and placing flow velocity dissipation devices at discharge locations to minimize channel and stream bank erosion and scour in the immediate vicinity of stormwater outfalls.

b. The permittee shall conduct all earth disturbance activities and, when applicable, shall maintain all post-construction stormwater management (PCSM) BMPs in accordance with 25 Pa. Code Chapter 102.

c. The permittee may not utilize polymers or other chemicals to treat stormwater unless written permission is obtained from DEP.

4. Spill Prevention and Responses.

The permittee shall minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop a PPC Plan for effective responses to such releases. The permittee shall conduct the following spill prevention and response measures, at a minimum:

a. Maintain an organized inventory of materials on-site. Plainly label containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides”) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur.

b. Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas.

c. Develop and implement employee and contractor training on the procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. The permittee shall conduct periodic training, no less than annually, and document the training on the Annual Report specified in paragraph B of this section.

d. Keep spill kits on-site, located near areas where spills may occur or where a rapid response can be made.

e. Notify appropriate facility personnel when a leak, spill, or other release occurs.

f. To the extent possible, eliminate or reduce the number and amount of hazardous materials and waste by substituting non-hazardous or less hazardous materials of equal function, as determined by the permittee.

g. Clean up leaks, drips, and other spills without using large amounts of water or liquid cleaners. Use absorbents for dry cleanup whenever possible.

When a leak, spill or other release occurs during a 24-hour period that contains a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 CFR Parts 110, 117 or 302, the permittee shall, in addition to the notification requirements contained in Part A III.C.4 of this permit, notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR Parts 110, 117, and 302 as soon as the permittee becomes aware of the discharge.

5. Sector- and Site-Specific BMPs.

a. The permittee shall implement the BMPs in the applicable Appendix to the NPDES PAG-03 General Permit for Discharges of Stormwater Associated with Industrial Activities that is currently in effect.

b. Fugitive Dust Emissions. Minimize fugitive dust emissions from coal handling areas to minimize the tracking of coal dust off-site that could be discharged in stormwater through implementation of control measures including but not limited to the following: install specially designed tires; and wash vehicles in a designated area before they leave the site and control the wash water.

c. Delivery Vehicles. Minimize contamination of stormwater runoff from delivery vehicles arriving at the plant site. Implement procedures to inspect delivery vehicles arriving at the plant site as necessary to minimize discharges of pollutants in stormwater. Ensure the overall integrity of the body or container of the delivery vehicle and implement procedures to deal with leakage or spillage from delivery vehicles.

d. Fuel Oil Unloading Areas. Minimize contamination of precipitation or surface runoff from fuel oil unloading areas. Use containment curbs in unloading areas where feasible. In addition, ensure personnel familiar with spill prevention and response procedures are available to respond expeditiously in the event of a leak or spill during deliveries. Ensure that any leaks or spills are immediately contained and cleaned up, and use spill and overflow protection devices (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).

e. Chemical Loading and Unloading. Minimize contamination of precipitation or surface runoff from chemical loading and unloading areas. Use containment curbs at chemical loading and unloading areas to contain spills, where practicable. In addition, ensure personnel familiar with spill prevention and response procedures are available to respond expeditiously in the event of a leak or spill during deliveries. Ensure leaks and spills are immediately contained and cleaned up and, where practicable, load and unload in covered areas and store chemicals indoors.

f. Miscellaneous Loading and Unloading Areas. Minimize contamination of precipitation or surface runoff from loading and unloading areas through implementation of control measures including but not limited to the following: cover the loading area; install grading, curbing, or berming around the loading area to divert run-on; locate the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.

g. Liquid Storage Tanks. Minimize contamination of surface runoff from above-ground liquid storage tanks through implementation of control measures including but not limited to the following: use protective guards around tanks; use containment curbs; install spill and overflow protection; use dry cleanup methods; or equivalent measures.

h. Large Bulk Fuel Storage Tanks. Minimize contamination of surface runoff from large bulk fuel

storage tanks. Use containment berms (or their equivalent).

i. Oil-Bearing Equipment in Switchyards. Minimize contamination of surface runoff from oil-bearing equipment in switchyard areas. Use level grades and gravel surfaces to retard flows and limit the spread of spills, or collect runoff in perimeter ditches.

j. Residue-Hauling Vehicles. Inspect all residue-hauling vehicles for proper covering over the load, adequate gate sealing, and overall integrity of the container body. Repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.

k. Ash Loading Areas. Reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water as necessary to minimize discharges of pollutants in stormwater.

l. Areas Adjacent to Disposal Ponds or Landfills. Minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills. Reduce ash residue that may be tracked on to access roads traveled by residue handling vehicles, and reduce ash residue on exit roads leading into and out of residue handling areas.

D. Routine Inspections.

1. The permittee shall visually inspect the following areas and BMPs on a semiannual basis (calendar periods), at a minimum:

a. Areas where industrial materials or activities are exposed to stormwater.

b. Areas identified in the PPC Plan as potential pollutant sources.

c. Areas where spills or leaks have occurred in the past three years.

d. Stormwater outfalls and locations where authorized non-stormwater discharges may commingle.

e. Physical BMPs used to comply with this permit.

At least once each calendar year, the routine inspection must be conducted during a period when a stormwater discharge is occurring.

2. The permittee shall evaluate and document the following conditions, at a minimum, in the Annual Report required by paragraph B of this section through required inspections:

a. Raw materials, products or wastes that may have or could come into contact with stormwater.

b. Leaks or spills from equipment, drums, tanks and other containers.

c. Off-site tracking of industrial or waste materials, or sediment where vehicles enter or exit the site.

d. Tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas.

e. Control measures or BMPs needing replacement, maintenance or repair.

f. The presence of authorized non-stormwater discharges that were not identified in the permit application and non-stormwater discharges not authorized by this permit.

E. Preparedness, Prevention and Contingency (PPC) Plan

1. The permittee shall develop and implement a PPC Plan in accordance with 25 Pa. Code § 91.34 following the guidance contained in DEP's "Guidelines for the Development and Implementation of

Environmental Emergency Response Plans" (DEP ID 400-2200-001), its NPDES-specific addendum and the minimum requirements below.

a. The PPC Plan must identify all potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the facility.

b. The PPC Plan must describe preventative measures and BMPs that will be implemented to reduce or eliminate pollutants from coming into contact with stormwater resulting from routine site activities and spills.

c. The PPC Plan must address actions that will be taken in response to on-site spills or other pollution incidents.

d. The PPC Plan must identify areas which, due to topography or other factors, have a high potential for soil erosion, and identify measures to limit erosion. Where necessary, erosion and sediment control measures must be developed and implemented in accordance with 25 Pa. Code Chapter 102 and DEP's "Erosion and Sediment Pollution Control Manual" (DEP ID 363-2134-008).

e. The PPC Plan must address security measures to prevent accidental or intentional entry which could result in an unintentional discharge of pollutants.

f. The PPC Plan must include a plan for training employees and contractors on pollution prevention, BMPs, and emergency response measures. This training must be conducted in accordance with paragraph C.4.c of this section.

g. If the facility is subject to SARA Title III, Section 313, the PPC Plan must identify releases of "Water Priority Chemicals" within the previous three years. Water Priority Chemicals are those identified in EPA's "Guidance for the Determination of Appropriate Methods for the Detection of Section 313 Water Priority Chemicals" (EPA 833-B-94-001, April 1994). The Plan must include an evaluation of all activities that may result in the stormwater discharge of Water Priority Chemicals.

h. Spill Prevention Control and Countermeasure (SPCC) plans may be used to meet the requirements of this section if the minimum requirements are addressed.

2. The permittee shall review and if necessary update the PPC Plan on an annual basis, at a minimum, and when one or more of the following occur:

a. Applicable DEP or federal regulations are revised, or this permit is revised.

b. The PPC Plan fails in an emergency.

c. The facility's design, industrial process, operation, maintenance, or other circumstances change in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency.

d. The list of emergency coordinators or equipment changes.

e. When notified in writing by DEP.

The permittee shall maintain all PPC Plan updates on-site, make the updates available to DEP upon request, and document the updates in Annual Reports.

F. Stormwater Monitoring Requirements.

1. The permittee shall conduct monitoring of its stormwater discharges at the representative outfalls identified in Part A of this permit, if applicable. The permittee shall document stormwater sampling event information and no exposure conditions for each calendar year on the Annual Report required by paragraph B of this section.

2. The permittee shall, upon written notice from DEP, install inlets, pipes, and/or other structures or devices that are considered necessary in order to conduct representative stormwater sampling, in accordance with a schedule provided by DEP.

3. The permittee shall collect all samples from discharges resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding storm did not yield a measurable discharge, or if the permittee is able to document that a less than 72-hour interval is representative for local storm events during the sample period.

4. The permittee shall collect all grab samples within the first 30 minutes of a discharge, unless the permittee determines that this is not possible, in which case grab samples must be collected as soon as possible after the first 30 minutes of a discharge. The permittee shall explain why samples could not be collected within the first 30 minutes of any discharge on the Annual Report required by paragraph B of this section.

5. The permittee shall collect stormwater samples at times when commingling with non-stormwater discharges is not occurring or at locations prior to the commingling of non-stormwater discharges, unless Part A of this permit recognizes commingling of stormwater and non-stormwater discharges.

6. In the event that stormwater discharge concentrations for a parameter exceeds the benchmark values identified below at the same outfall for two or more consecutive monitoring periods, the permittee shall develop a corrective action plan to reduce the concentrations of the parameters in stormwater discharges. The permittee shall submit the corrective action plan to DEP within 90 days of the end of the monitoring period triggering the need for the plan, and shall implement the plan immediately upon submission or at a later time if authorized by DEP in writing. The permittee shall, in developing the plan, evaluate alternatives to reduce stormwater concentrations and select one or more BMPs or control measures for implementation, unless the permittee can demonstrate in the plan that (1) the exceedances are solely attributable to natural background sources; (2) no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice; or (3) further pollutant reductions are not necessary to prevent stormwater discharges from causing or contributing to an exceedance of applicable water quality standards.

Parameter	Benchmark Value (mg/L)
Total Suspended Solids	100
Oil and Grease	5.0
Nitrate-Nitrite Nitrogen	0.68
Aluminum, Total	0.75
Chromium, Total	0.074
Iron, Total	1.0
Manganese, Total	1.0
Zinc, Total	0.12
pH (standard units)	between 6.0 and 9.0

VIII. COOLING WATER INTAKE STRUCTURE(S)

A. Nothing in this permit authorizes a take of endangered or threatened species under the Endangered Species Act.

B. Technology and operational measures currently employed at the cooling water intake structures must be operated in a way that minimizes impingement mortality and entrainment to the fullest extent possible.

C. The location, design, construction or capacity of the intake structure(s) may not be altered without prior approval of DEP.

D. The permittee shall monitor the actual intake flows at a minimum frequency of daily, including measurements of cooling water withdrawals, make-up water and blow down volume or, alternatively, monitor cycles of concentration at a minimum frequency of daily.

E. Requirements for Permit Renewal Application.

If this permit expires after July 14, 2018, the permittee shall submit the applicable information specified in 40 CFR § 122.21(r) with its subsequent permit renewal application, as follows:

1. Source water physical data.

2. Cooling water intake structure data.

3. Source water biological baseline characterization data.

4. Cooling water system data.

5. Chosen method(s) of compliance with impingement mortality standard.

6. Entrainment performance studies.

7. Operational status.

8. The facility will provide information to the Department which addresses the specific factors outlined in 40 CFR §125.98(f)(2).

9. If DEP requests additional information to make a BTA determination, the permittee shall submit information within 30 days unless an alternate schedule is approved by DEP.

F. The permittee will complete 1 year of entrainment sampling during the permit cycle. The permittee will submit an entrainment sampling study plan at least six months prior to commencement of sampling. Sampling results will be submitted to DEP within 15 days of receipt of the final report.

G. Operation of the facility's existing closed-cycle recirculation system constitutes interim BTA for impingement and entrainment pursuant to 40 CFR § 125.98(b)(5).

H. If the permittee wishes to submit a request for a reduction in permit application requirements as outlined in 40 CFR §125.95 (c) it must be submitted to DEP at least two years and six months before this permit expires.

I. The permittee shall retain data and other records for any information developed pursuant to Section 316(b) of the Clean Water Act for a minimum of ten years.

J. New Units.

The permittee must submit applicable information in 40 CFR §122.21(r) at least 180 days prior to the planned commencement of cooling water withdrawals associated with the operation of a new unit (as defined in 40 CFR §125.92(u)).

IX. TOTAL MAXIMUM DAILY LOAD COMPLIANCE REQUIREMENTS

The permittee shall demonstrate compliance with the Total Annual Load effluent limit for Total Suspended Solids at Outfall 111 as follows:

A. The permittee shall record and report the Total Monthly Precipitation ("TMP") received at the Keystone Generating Station ("site") using precipitation data from a local weather station or equivalent alternative. The Department shall approve the method selected for collecting precipitation data prior to use. At the end of each calendar year, the permittee shall calculate and report the Total Annual Precipitation ("TAP") for the site as the sum of the calendar year's twelve TMP values. TMP and TAP values shall be reported at Outfall 111.

B. The permittee shall calculate and report the Total Monthly Flow ("TMF") at Outfalls 003, 010, 011, 012, 013, 014, 021, 022 and Internal Monitoring Points 106, 206. The Total Annual Flow ("TAF") at each of those monitoring locations shall be calculated and reported as the sum of the calendar year's twelve TMF values. The permittee shall calculate and report the Total Quarterly Flow ("TQF") at Internal Monitoring Point 107 and the TAF at IMP 107 shall be calculated and reported as the sum of the calendar year's previous four TQF values.

C. The permittee shall calculate and report the Total Annual Flow ("TAF") at storm water Outfalls 004, 008, 009, and 015. The Department recommends that the permittee install continuous flow monitoring at storm water Outfalls 004, 008, 009, and 015. If it is not feasible to install continuous flow monitoring equipment at any of the outfalls, TAF at Outfalls 004, 008, 009, and 015 shall be calculated using the SCS Runoff Curve Number Method described in USDA Natural Resource Conservation Service's Technical Release 55 ("TR-55"). The curve number(s) used for the SCS Runoff Curve Number Method must reflect the land uses of the areas draining to each outfall at the time of permit issuance. The Department will approve the selected curve number(s) prior to use and changes to the curve number(s) shall be made only after the permittee provides notification to the Department and the Department confirms the accompanying changes in land use at the facility.

D. The permittee shall report the Total Loads of Total Suspended Solids at Outfalls 003, 010, 011, 012, 013, 014, 021, 022 and Internal Monitoring Points 106, 206, and 107 pursuant to the reporting requirements specified in Part A of this permit. Total Loads for each specified period (month, quarter, and/or year) shall be calculated using the following formula:

$$Total\ Load, lbs = \frac{\left(\begin{matrix} Average\ Discharge\ TSS \\ Concentration\ for\ the\ period \end{matrix} mg/L\right) \times (Total\ Flow\ for\ the\ period, gal) \times (3.785 \frac{L}{gal})}{\left(453{,}590 \frac{mg}{lb}\right)}$$

E. The Total Annual Load of Total Suspended Solids at Outfall 111 will be calculated and reported as the sum of the Total Annual Loads at Outfalls 003, 004, 008, 009, 010, 011, 012, 013, 014, 015, 021, 022 and Internal Monitoring Points 106, 206, and 107. The permittee shall comply with the Total Annual Load limit of Total Suspended Solids at Outfall 111 or take additional measures to achieve compliance.

F. The calculated Total Annual Load shall be reported on the TMDL Supplemental Report Annual Load Summary. The permittee shall retain records of all calculations required by this condition (including all information used in those calculations) and shall submit those records to the Department with the TMDL Supplemental Report Annual Load Summary.

X. DISSOLVED OXYGEN SCHEDULE OF COMPLIANCE

A. The permittee shall achieve compliance with final effluent limitations for Dissolved Oxygen (D.O.) at IMP 303 as stated in Part A.I.H of this Permit or terminate this discharge in accordance with the following schedule:

1.	Submit a report to DEP summarizing D.O. monitoring results and ability to comply with final limits. If compliance is not achieved, include a compliance plan with the report.	12 Months after Permit Effective Date
2.	If additional treatment facilities are necessary, submit a Water Quality Management Permit Amendment Application to DEP. Otherwise, submit a progress report.	18 Months after Permit Effective Date
3.	Achieve compliance with final effluent limits.	24 Months after Permit Effective Date

Compliance with each scheduled requirement shall be achieved on or before the indicated date.

B. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit to DEP a written notice of compliance or non-compliance with the specific schedule requirement. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance.

2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement.

3. A description of any factors which tend to explain or mitigate the non-compliance.

4. An estimate of the date that compliance with the elapsed schedule requirement will be achieved and an assessment of the probability that the next scheduled requirement will be met on time.

XI. HEAT REJECTION RATE SCHEDULE OF COMPLIANCE

A. The permittee shall achieve compliance with final December Heat Rejection Rate limit at Outfall 003 as stated in Part A.I.P of this Permit or terminate this discharge in accordance with the following schedule:

1. Submit a compliance plan describing the compliance options considered and the selected option(s).	12 Months after Permit Effective Date
2. If additional treatment facilities are necessary, submit a Water Quality Management Permit Amendment Application to DEP.	24 Months after Permit Effective Date
3. Submit progress reports.	every six months starting six months after Permit Effective Date
4. Achieve compliance with final effluent limit.	three years after Permit Effective Date

Compliance with each scheduled requirement shall be achieved on or before the indicated date.

B. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit to DEP a written notice of compliance or non-compliance with the specific schedule requirement. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance.

2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement.

3. A description of any factors which tend to explain or mitigate the non-compliance.

4. An estimate of the date that compliance with the elapsed schedule requirement will be achieved and an assessment of the probability that the next scheduled requirement will be met on time.