



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

NPDES PERMIT NO: PA0051926

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.*,

**Exelon Generation Co. LLC
3146 Sanatoga Road
Pottstown, PA 19464-3418**

is authorized to discharge from a facility known as **Exelon Limerick Generating Station**, located in **Limerick Township, Montgomery County**, to **Schuylkill River, Possum Hollow Run, and Sanatoga Creek** in Watershed(s) **3-D** 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 DECEMBER 1, 2014

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON NOVEMBER 30, 2019

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 _____

ISSUED BY _____

**Jenifer L. Fields, P.E.
Clean Water Program Manager
Southeast Regional Office**

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

I. A. For Outfall 001, Latitude 40° 13' 13.00", Longitude 75° 35' 22.00", River Mile Index 48.01, Stream Code 00833

Receiving Waters: Schuylkill River

Type of Effluent: Cooling tower blow down, treated radioactive waste, laundry drains, holding pond effluent, spray pond effluent, closed cooling water and manhole dewatering water.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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 ^{1 & c}
	Average Monthly	Daily Maximum	Inst. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.) ^d	XXX	XXX	6.0	XXX	XXX	9.0	1/day	See Permit ^d
Total Residual Oxidants ^a	XXX	XXX	XXX	XXX	0.2	0.5	1/week	Grab
Specific Conductance (µmhos/cm)	XXX	XXX	XXX	Report	Report	Report	2/month	24-Hr Composite
Temperature (°F) ^b (11/1/2014 to 10/31/2016)	XXX	XXX	XXX	Report	Report	110	1/Week	I-S
Temperature (°F) ^b (11/1/2016 to 10/31/2019)	XXX	XXX	XXX	Report	Report	110	Continuous ^b	I-S
Total Suspended Solids ^e	XXX	XXX	XXX	Report	Report	Report	See Permit ^e	24-Hr Composite
Total Suspended Solids Effluent Net ^e	XXX	XXX	XXX	30	60	75	See Permit ^e	Calculation
Total Suspended Solids Influent ^e	XXX	XXX	XXX	Report	Report	Report	See Permit ^e	24-Hr Composite
Total Dissolved Solids ^f (11/01/2014 to 10/31/2016)	XXX	XXX	XXX	Report	Report	Report	2/month ^f	24-Hr Composite
Total, Zinc	XXX	XXX	XXX	1.0	1.0	Report	2/month	24-Hr Composite
Total, Chromium	XXX	XXX	XXX	0.2	0.2	Report	2/month	24-Hr Composite

Outfall 001, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Inst. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total, Aluminum	XXX	XXX	XXX	Report	Report	Report	2/month	24-Hr Composite
Total, Iron	XXX	XXX	XXX	Report	Report	Report	1/month	24-Hr Composite
Total, Copper	XXX	XXX	XXX	Report	Report	Report	2/month	24-Hr Composite
Total, Lead	XXX	XXX	XXX	Report	Report	Report	2/month	24-Hr Composite
Sulfate	XXX	XXX	XXX	Report	Report	Report	1/quarter	24-Hr Composite
Chloride	XXX	XXX	XXX	Report	Report	Report	1/quarter	24-Hr Composite
Bromide	XXX	XXX	XXX	Report	Report	Report	1/quarter	24-Hr Composite
1-4 Dioxane ⁹	XXX	XXX	XXX	Report	Report	Report	1/quarter	24-Hr Composite
Bis(2-Ethylhexyl)Phthalate	XXX	XXX	XXX	Report	Report	Report	1/quarter	24-Hr Composite
Chronic Toxicity - Ceriodaphnia Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	24-Hr Composite
Chronic Toxicity - Pimephales Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	24-Hr Composite
Chronic Toxicity - Ceriodaphnia Reproduction (TUc)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	24-Hr Composite
Chronic Toxicity - Pimephales Growth (TUc)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	24-Hr Composite
PCBs (Dry Weather) (11/1/2014 to 10/31/2015)	XXX	XXX	XXX	XXX	Report	XXX	1/year	24-Hr Composite
PCBs (Wet Weather) (11/1/2014 to 10/31/2015)	XXX	XXX	XXX	XXX	Report	XXX	1/year	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 001

^a See Other Requirement No. J, K and L.

^b See Other Requirement No. N and O.

^c Time weighted 24-hour composite sample is acceptable for Outfall 001 and intake (if needed)

^d See Other Requirement No. R for pH monitoring compliance requirements.

^e Monitoring Requirements and Effluent limitations apply only during periods of chemical addition. See Other Requirement No. S. Additional monitoring requirements are set forth in Other Requirement No. T.

^f See Other Requirement no. V

^g See Other Requirement no. W.

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

I. B. For IMP 201, Latitude 40° 13' 13.00", Longitude 75° 35' 22.00", River Mile Index 48.01, Stream Code 00833

Receiving Waters: Schuylkill River via Outfall 001

Type of Effluent: Wastewater from holding pond (non-hazardous and industrial wastewater generated as part of the routine plant operation, maintenance and testing), boiler blow down, and reverse osmosis reject water.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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	Inst. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (GPD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Measured
Total Suspended Solids	XXX	XXX	XXX	30	100	100	2/month	Grab
Oil and Grease	XXX	XXX	XXX	15	20	30	2/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at IMP 201 (holding pond)

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

I. C. For IMP 301, Latitude 40° 13' 13.00", Longitude 75° 35' 22.00", River Mile Index 48.01, Stream Code 00833

Receiving Waters: Schuylkill River via Outfall 001

Type of Effluent: Wastewater from radioactive waste treatment plant and laundry drain collection system.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (GPD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Measured
Total Suspended Solids	XXX	XXX	XXX	30	100	100	Daily when Discharging*	Grab
Oil and Grease	XXX	XXX	XXX	15	20	30	Daily when Discharging*	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at IMP 301

*Sample shall be taken daily during discharge of wastewater from the laundry drain collection system.

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

I. D. For IMP 401, Latitude 40° 13' 13.00", Longitude 75° 35' 22.00", River Mile Index _____, Stream Code _____

Receiving Waters: Schuylkill River via Outfall 001

Type of Effluent: Wastewater from emergency spray pond.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (GPD)	Report	Report	XXX	XXX	XXX	XXX	Daily when Discharging	Measured
Total Phosphorus	XXX	XXX	XXX	Report	Report	Report	1/week	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at IMP 401. Flow measurement shall be taken from the emergency spray pond overflow location. Phosphorus sample shall be taken from the spray pond.

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

I. E. For Outfall 002, Latitude 40° 13' 19.7", Longitude 75° 35' 14.2", River Mile Index 0.23, Stream Code 01640
which receives storm water from area around former sewage treatment plant and service area.

I. F. For Outfall 004, Latitude 40° 13' 20.9", Longitude 75° 35' 9.5", River Mile Index 0.28, Stream Code 01640
which receives storm water from fuel storage area.

I. G. For Outfall 022, Latitude 40° 13' 18.3", Longitude 75° 35' 16.0", River Mile Index 0.19, Stream Code 01640
which receives storm water from wastewater treatment plant and service road.

I. H. For Outfall 024, Latitude 40° 13' 17.6", Longitude 75° 35' 15.8", River Mile Index 0.19, Stream Code 01640
which receives storm water from service road near wastewater treatment plant.

Discharging to Possum Hollow Run.

The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date. 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, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Maximum Daily	Minimum	Average Monthly	Maximum Daily	Instant. Maximum		
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
pH	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Nickel	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): **at Outfall 002**, remaining outfalls shall be inspected once per year. See Other Requirements No. V.REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS.

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

I. I. For Outfall 003, Latitude 40° 13' 17.00", Longitude 75° 35' 14.00", River Mile Index 0.265, Stream Code 01640

which receives wastewater from floor drains, chiller waste water, cooling water and storm water.

I. I. For Outfall 005, Latitude 40° 13' 22.70", Longitude 75° 35' 6.10", River Mile Index 0.36, Stream Code 01640

which receives wastewater from floor drains, chiller waste water, cooling water and storm water.

Receiving Waters: Possum Hollow Run

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/discharge	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/discharge	Grab
Total Residual Oxidants	XXX	XXX	XXX	XXX	0.2	0.5	1/discharge	Grab
Temperature (°F)	XXX	XXX	XXX	XXX	XXX	110	1/discharge	I-S
Total Suspended Solids	XXX	XXX	XXX	Report	Report	Report	1/discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Discharge through drain valves from cooling water system (for Outfall 003 and 005)

* Collect one sample per batch discharge event from the cooling water system.

I. J. For Outfall 006, Latitude 40° 13' 23.7", Longitude 75° 35' 21.5", River Mile Index 48.15, Stream Code 00833
which receives storm water from maintenance area of metal shop and hardware.

I. K. For Outfall 007, Latitude 40° 13' 24.5", Longitude 75° 35' 22.4", River Mile Index 48.28, Stream Code 00833
which receives storm water from area around health physics building, hardware shop and offices.

I. L. For Outfall 008, Latitude 40° 13' 26.5", Longitude 75° 35' 25.1", River Mile Index 48.32, Stream Code 00833
which receives storm water from area around health physics and electrical substation.

I. M. For Outfall 009, Latitude 40° 13' 28.8", Longitude 75° 35' 26.3", River Mile Index 48.34, Stream Code 00833
which receives storm water from area around control building, instrument shop and storage.

Discharging to Schuylkill River.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Maximum Daily	Minimum	Average Monthly	Maximum Daily	Instant. Maximum		
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
pH	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Nickel	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): **at Outfall 008**. All other remaining outfalls shall be inspected once per year. See Other Requirements No. V.REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

I. N. For Outfall 010, **Latitude** 40° 13' 15.0", **Longitude** 75° 35' 23.0", **River Mile Index** 48.11, **Stream Code** 00833

which receives wastewater from Schuylkill River intake water through make up header drain.

Discharging to Schuylkill River.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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, Footnotes and Supplemental Information).
3. This discharge shall consist solely of Schuylkill River water from makeup head drain.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): No Monitoring Required.

I. O. For Outfall 011, **Latitude** 40° 13' 15.0", **Longitude** 75° 35' 23.0", **River Mile Index** 48.07, **Stream Code** 00833

which receives wastewater from intake screen backwash, Schuylkill River pump house pipe leakage, pump cooling water and air conditioning condensate.

Discharging to Schuylkill River.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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, Footnotes and Supplemental Information).
3. Debris collected on the intake trash racks shall not be returned back to water.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): No Monitoring Required.

I. P. For Outfall 012, Latitude 40° 13' 15", Longitude 75° 35' 23", River Mile Index 48.06, Stream Code 00833

Discharging to Schuylkill River

Which receives wastewater from dredging operation of the Schuylkill River Pump House and storm water from service roads.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Maximum Daily	Minimum	Average Monthly	Maximum Daily	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Daily when Discharging	Estimate
pH	XXX	XXX	Report	XXX	XXX	Report	Daily when Discharging	Grab
Total Iron	XXX	XXX	XXX	Report	7.0	XXX	Daily when Discharging	Grab
Dissolved Iron	XXX	XXX	XXX	Report	Report	XXX	Daily when Discharging	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	100	XXX	Daily when Discharging	Grab
Oil and Grease	XXX	XXX	XXX	Report	Report	XXX	Daily when Discharging	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 012, Daily during dredging operation and when discharging.

I. Q. Outfall 013, **Latitude** 40° 13' 23", **Longitude** 75° 35' 07", **Discharging to** Possum Hollow Run

which receives storm water from service roads and parking lots.

I. R. Outfall 014, **Latitude** 40° 13' 26", **Longitude** 75° 35' 04", **Discharging to** Possum Hollow Run

which receives storm water from service roads and parking lots.

I. S. Outfall 015, **Latitude** 40° 13' 27", **Longitude** 75° 35' 04", **Discharging to** Possum Hollow Run

which receives storm water from service roads and parking lots.

I. T. Outfall 016, **Latitude** 40° 13' 33", **Longitude** 75° 34' 57", **Discharging to** Possum Hollow Run

which receives storm water from service roads and parking lots.

I. U Outfall 017, **Latitude** 40° 13' 33", **Longitude** 75° 33' 54", **Discharging to** Possum Hollow Run

which receives storm water from service roads and parking lots.

I. V. Outfall 018, **Latitude** 40° 13' 35", **Longitude** 75° 34' 54", **Discharging to** Possum Hollow Run

which receives storm water from yard drains..

I. W. Outfall 019, **Latitude** 40° 13' 32", **Longitude** 75° 34' 50", **Discharging to** Possum Hollow Run

which receives storm water from service roads and parking lots.

Discharging to Possum Hollow Run.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Maximum Daily	Minimum	Average Monthly	Maximum Daily	Instant. Maximum		
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
pH	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Nickel	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): **at Outfall 019**. All other outfalls shall be inspected once per year. See Other Requirements No. V. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

I. X. For Outfall 020, Latitude 40° 13' 34.20", Longitude 75° 34' 48.90", River Mile Index 0.44, Stream Code 01640

Discharging to Possum Hollow Run.

which receives wastewater from Perkiomen Creek make up storage tank overflow.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Maximum Daily	Minimum	Average Monthly	Maximum Daily	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/Discharge	Calculation
pH	XXX	XXX	6.0	XXX	XXX	9.0	1/Discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	100	100	1/Discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 020

I. Y. For Outfall 021, Latitude 40° 13' 37", Longitude 75° 35' 25", River Mile Index 48.38, Stream Code 00833

Discharging to Schuylkill River.

which receives storm water from cooling tower screen wash and acid/chlorine storage area and cooling tower drift losses and cooling tower leakage during filling of a tower following startup.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency *	Required Sample Type
	Average Monthly	Maximum Daily	Minimum	Average Monthly	Maximum Daily	Instant. Maximum		
CBOD ₅	XXX	XXX	XXX	XXX	Report	XXX	1/Discharge	Grab
Chemical Oxygen Demand	XXX	XXX	XXX	XXX	Report	XXX	1/Discharge	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/Discharge	Grab
pH	XXX	XXX	XXX	XXX	Report	XXX	1/Discharge	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/Discharge	Grab
Total Kjeldahl Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/Discharge	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/Discharge	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/Discharge	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): **at Outfall 021** for non-storm wastewater.

* These parameters shall also be sampled once a year during a storm water discharge event. See Other Requirements No.V, REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

I. Z. For Outfall 030, Latitude 40° 20' 00", Longitude 75° 37' 34", River Mile Index 0.23, Stream Code 01641
which receives storm water from yard drains.

Discharging to Sanatoga Creek.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
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, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Maximum Daily	Minimum	Average Monthly	Maximum Daily	Instant. Maximum		
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
pH	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Nickel	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): **at Outfall 030.**
See Other Requirements No. V: REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS.

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

Additional Requirements

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) and 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. (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.

Supplemental Information:

- (1) The effluent limitations for outfall 001 were determined by using effluent discharge rate of 14.19 MGD.
- (2) The effluent limitations for outfall 003 were determined by using effluent discharge rate of 1.10 MGD.
- (3) The effluent limitations for outfall 005 were determined by using effluent discharge rate of 1.10 MGD.
- (4) The effluent limitations for outfall 010 were determined by using effluent discharge rate of 0.10 MGD.
- (5) The effluent limitations for outfall 011 were determined by using effluent discharge rate of 0.20 MGD.
- (6) The effluent limitations for outfall 012 were determined by using effluent discharge rate of 0.01 MGD.
- (7) The effluent limitations for outfall 020 were determined by using effluent discharge rate of 1.50 MGD.
- (8) The effluent limitations for outfall 002, 004, 006, 007, 008, 009 013, 014, 015, 016, 017, 018, 019 022, 024 were for storm water discharges.
- (9) The effluent limitations for Monitoring Point 201 were determined by using effluent discharge rate of 0.3 MGD
- (10)The effluent limitations for Monitoring Point 301 were determined by using effluent discharge rate of 0.001 MGD
- (11)The effluent limitations for Monitoring Point 401 were determined by using effluent discharge rate of 3.5 MGD

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 pollution to surface waters of the Commonwealth. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (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 the production of goods or chemicals used in the treatment of wastewater, with the exception of wastewater treatment chemicals containing polyacrylamides.

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). The samples must be combined in the laboratory immediately before analysis and then one analysis is performed. (EPA Form 2C)

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 and 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 and 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)

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.

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 and 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 (40 CFR 122.41(j)(4))

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. Unless otherwise specified in this permit, the test procedures for the analysis of pollutants shall be those approved under 40 CFR Part 136 (or in the case of sludge use or disposal, approved under 40 CFR Part 136, unless otherwise specified in 40 CFR Part 503 or Subpart J of 25 Pa. Code Chapter 271), or alternate test procedures approved pursuant to those parts, unless other test procedures have been specified in this permit.

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. (40 CFR 122.41(e),122.44(i)(1))
2. Discharge Monitoring Reports (DMRs) must be completed in accordance with DEP's published DMR Instructions (3800-BPNPSM-0463). DMRs are based on calendar reporting periods. DMR(s) must be received by the agency(ies) specified in paragraph 3 below 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.
3. The permittee shall complete all Supplemental Reporting forms (Supplemental DMRs) provided by DEP in this permit (or an approved equivalent), and submit the signed, completed forms as an attachment to the DMR(s). If the permittee elects to use DEP's electronic DMR (eDMR) system, one electronic submission may be made for DMRs and Supplemental DMRs. If paper forms are used, the completed forms shall be mailed to:

Department of Environmental Protection
Water Management Program
2 East Main Street
Norristown, PA 19401

NPDES Enforcement Branch (3WP42)
Office of Permits & Enforcement
Water Protection Division
U.S. EPA - Region III
1650 Arch Street
Philadelphia, PA 19103-2029

4. If the permittee elects to begin using DEP's eDMR system to submit DMRs required by the permit, the permittee shall, to assure continuity of business operations, continue using the eDMR system to submit all DMRs and Supplemental Reports required by the permit, unless the following steps are completed to discontinue use of eDMR:
 - a. The permittee shall submit written notification to the regional office that issued the permit that it intends to discontinue use of eDMR. The notification shall be signed by a principal executive officer or authorized agent of the permittee.
 - b. The permittee shall continue using eDMR until the permittee receives written notification from DEP's Central Office that the facility has been removed from the eDMR system, and electronic report submissions are no longer expected.
5. 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, 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))

6. 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))
 - e. The facility is proposing an expansion or modifications to its treatment processes.
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 changes in the volume or pollutant concentration of its influent waste stream as a result of indirect discharges or hauled-in wastes, 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-BPNPSM0482), available on DEP's web site. 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 one or more of the following criteria:

- (i) Were not detected in the facilities' influent waste stream as reported in the permit application, or were otherwise not analyzed in the influent and reported to DEP prior to permit issuance;

- (ii) Have not been previously 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 were otherwise analyzed and reported to DEP prior to permit issuance;
- (ii) Have an effluent limitation or monitoring requirement in this permit;
- (iii) Have been previously approved for the permittee's influent waste stream by DEP in writing.

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 10% 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) 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-BPNPSM0450) 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.

- (7) Documentation of whether or not a chemical analysis of the residual wastes were reported on a Residual Waste Form 26R, or a separate waste characterization using the parameters from Form 26R.

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, the residual wastes shall not be accepted by the permittee until such time as the transporter is able to provide the required information.

- (ii) The following conditions apply to the characterization of residual wastes received by the permitted treatment facility:
- (1) The permitted facility must receive and maintain on file a characterization of the residual wastes it receives from the generator, as required by 25 Pa. Code 287.54. The characterization shall 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 characterized accordingly.
 - (2) For wastewater generated from hydraulic fracturing operations ("frac wastewater") within the first 30 production days of a well site, the characterization may be a general frac wastewater characterization approved by DEP. Thereafter, the characterization must be waste-specific and 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) 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-BPNPSM0437) 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 BOD₅ 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 Sections 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-BPNPSM0440). 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 Schedules (25 Pa. Code 92a.51 and 40 CFR 122.47(a))

1. The permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit.
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. (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
 - (i) The permittee shall submit immediate notice of an unanticipated bypass causing or threatening pollution. The notice shall be in accordance with Part A III.C.4.a.
 - (ii) 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 92 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 controller 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 Point and Non-Point Source Management
Re: Chapter 92a Annual Fee
P.O. Box 8466
Harrisburg, PA 17105-8466

PART C

I. OTHER REQUIREMENTS:

- A. If, at any time, the DEP determines that the discharge permitted herein creates a public nuisance or causes environmental harm to the receiving water of the Commonwealth, the DEP may require the permittee to adopt such remedial measures as will produce a satisfactory effluent. If the permittee fails to adopt such remedial measures within the time specified by the DEP, the right to discharge herein granted shall, upon notice by the DEP, cease and become null and void.
- B. 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 the DEP, or by EPA for this type of industry, and if such standard or limitation is more stringent than the corresponding conditions of this permit (or if it controls pollutants not covered by this permit), then the DEP reserves the right to modify, or to revoke and reissue the permit to conform with that standard or limitation.
- C. If there is a change in ownership of this facility or in the name of the permittee, an application for transfer of the permit must be submitted to the DEP.
- D. 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, except for the fish return system, in accordance with Clean Water Act 316(b) requirements.

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.

- E. The DEP may identify and require certain discharge specific data to be submitted before the expiration date of this permit. Upon notification by the DEP, the permittee will have 12 months from the date of the notice to provide the required data. These data, along with any other data available to the DEP, will be used in completing the Watershed TMDL/WLA Analysis and in establishing discharge effluent limits. In the event that DEP requires the submission of data pursuant to this condition, the permittee shall have the right to appeal or otherwise contest the requirement.
- F. Instantaneous maximum limitations are imposed to allow for a grab sample to be collected by the appropriate regulatory agency to determine compliance. The permittee does not have to monitor for the instantaneous maximum limitation except for the parameters temperature, oil and grease, pH, total residual chlorine, and fecal coliform. However, if grab samples are collected for parameters normally monitored through composite sampling, the results must be reported.
- G. The Environmental Laboratory Accreditation Act of 2002 requires that all environmental laboratories register with the DEP. An environmental laboratory is any facility engaged in the testing or analysis of environmental samples required by a statute administered by the DEP relating to the protection of the environment or of public health, safety, and welfare.
- H. The permittee is required to submit an updated Preparedness, Prevention, and Contingency (PPC) Plan within 60 days after the effective date of the permit, and from time to time if the PPC plan receives major modifications. The PPC Plan shall be submitted to DEP's Regional Office address listed in Part A of this permit, and the transmittal shall reference the permit number and facility name listed on page 1 of the permit.

- I. This permit may be modified, revoked, and reissued to incorporate revised effluent limitations or other water quality standards in accordance with any determination of a Section 316(a) Clean Water Act relative to thermal discharge from this permitted facility.
 - J. The term total residual oxidants, for water with bromides generated through the use of a chemical additive, is defined as the value obtained using the amperometric method for total residual chlorine as described in 40 C.F.R. Section 136. This method is described in Standard Methods as the “amperometric titration method.”
 - K. The term Maximum Daily Concentration, as it relates to total residual oxidants (TRO) discharge, means the average analysis made over a single period of TRO release, which does not exceed three hours.
 - L. For Outfall 001, total residual oxidants may not be discharged from any unit for more than three hours in any one day, and not more than one unit in any plant may discharge total residual oxidants at any one time.
- M. Authorized non-stormwater discharges through Permitted Outfalls:**
- (a) The following non-stormwater discharges may be authorized through the permitted stormwater outfalls, provided the discharge is in compliance with part (b) of this requirement: discharges from fire fighting activities, fire hydrant flushings, potable water sources, including waterline flushings, irrigation drainage, lawn watering, routine external building washdown which does not use detergents or other compounds, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used, air conditioning condensate, springs, uncontaminated groundwater, and foundation or footing drains where flows are not contaminated with process materials such as solvents.
 - (b) Except for flows from fire fighting activities, sources of non-stormwater listed in part (a) (authorized non-stormwater discharges) that are combined with stormwater discharges must be identified in the PPC Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge.
- N. Within 24 months of the permit issuance, the permittee shall continuously monitor temperature in the Schuylkill River upstream and downstream from Outfall 001. Upstream monitoring shall be performed at a location that is not influenced by the discharge and representative of the river (LGS Intake). Downstream monitoring shall be performed at a location(s) representative of the river following assimilation of the LGS thermal load. The downstream monitoring location(s) shall be selected by LGS and approved by the Department. Results shall be submitted annually in Excel spreadsheet format. Results shall include date, average daily temperature, and maximum daily temperature for the upstream and downstream monitoring point. Data will be used to analyze compliance with Chapter 93 Water Quality Criteria.

Beginning on the date of permit issuance, the permittee shall continuously monitor facility intake flows, discharge flow and Schuylkill River flow upstream of the outfall 001 using the USGS Pottstown Gauge. Intake flow includes Schuylkill and Perkiomen River makeup flow, Spray pond makeup flows and Water Treatment Plant flows. Discharge flow to Outfall 001 shall be monitored as the total of the individual monitored flow from each input to Outfall 001. This includes the cooling tower blow down flows (continuously monitored) and Outfalls 201, 301 and 401 flows (each monitored and totalized daily). The results shall be submitted annually along with the above temperature data.

Within 24 months of permit issuance, the permittee shall monitor temperature continuously at Outfall 001. The temperature monitoring location shall be selected by permittee and approved by Department. Sample results shall be submitted monthly with monthly Discharge Monitoring Reports (DMRs).

Continuous temperature monitoring shall consist of at least one measurement every hour. When a continuous temperature monitor is unavailable due to calibration, repair or an emergency, the Permittee may collect temperature data either with an alternative continuous temperature monitor or by collecting representative grab samples. Grab samples shall be collected twice per calendar day (approximately every

12 hours) if the temperature of the Schuylkill River on the previous calendar day averaged greater than 50°F or once per calendar day if the temperature of the Schuylkill River on the previous calendar day averaged less than or equal to 50°F. The use of such reporting and reason for the continuous monitoring downtime shall be noted in the Remarks section of the DMR and annual report.

Continuous flow monitoring shall consist of at least one measurement every hour. When a continuous flow monitor is unavailable due to calibration, repair or an emergency, the flow will be reported using pump curve data and operating times for each pump. The Permittee may also collect flow data using an alternative flow measuring device. For USGS Pottstown Gage, river flow during gage downtime will be reported as provided by the USGS. The use of such reporting and reason for the continuous monitoring downtime shall be noted in the remark section of the DMR and annual report.

- O. The discharge may not change the temperature of the receiving stream by more than 2°F in any one-hour period.
- P. The permittee shall comply at all times with the terms and conditions related to discharge of effluent imposed by the US Nuclear Regulatory Commission (NRC) in the facility operating license nos. NPF-39 & NPF-85, and latest revision of Delaware River Basin Commission's Docket No. D-69-210 CP-13 or current docket
- Q. Calendar week is defined as the seven consecutive days from Monday through Sunday. 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.
- R. Permittee shall monitor pH at Outfall 001 a minimum of three days per week, and use flow averaged results from Unit 1 and Unit 2 cooling tower in-line pH monitor device for the remainder of the week for the compliance of pH monitoring of outfall 001.
- S. Total Suspended Solids Monitoring During Periods of Chemical Addition:
 - 1. General Requirements and Sample Frequency
 - a. Total Suspended Solids (TSS) shall be monitored daily during the addition of Spectrum DT 1400 or NALCO 1315 at the cooling towers. Time proportional composite samples shall be collected from:
 - i. Unit 1 cooling tower blowdown
 - ii. Unit 2 cooling tower blowdown, and,
 - iii. The discharge through Outfall 001
 - b. Time proportional composite samples shall be collected either using a compositor that collects aliquots at evenly spaced intervals or by collecting grab samples every two hours during the period when DT 1400 or NALCO 1315 is in use.
 - c. The average flow rates shall be collected for each sample location during each sample event.
 - 2. Calculations
 - a. The TSS samples collected shall be designated as:
 - i. CT1TSS = TSS at Unit 1 cooling tower blow down (mg/l)
 - ii. CT2TSS = TSS at Unit 2 cooling tower blow down (mg/l)
 - iii. DTSS = TSS at discharge through Outfall 001 (mg/l)
 - b. The flow rates shall be designated as:
 - i. CT1Q = Unit 1 cooling tower blowdown flow rate (MGD)

- ii. CT2Q = Unit 2 cooling tower blowdown flow rate (MGD)
 - iii. DQ = discharge flow rate through Outfall 001(MGD)
- c. The net TSS shall be calculated as:

$$\text{NET TSS} = (\text{DTSS}) - \frac{(\text{ })\text{CT1TSS} * \text{CT1Q} (+) \text{CT2TSS} * \text{CT2Q}(\text{ })}{(\text{CT1Q} + \text{CT2Q})}$$

3. Limitations:

The net addition of TSS during the addition of Spectrum DT 1400 or NALCO 1315 shall be limited to:

- i. 30 mg/L as a Monthly Average
- ii 60 mg/L as a Daily Maximum
- iii 75 mg/L as an Instantaneous Maximum

T. Total Suspended Solids Monitoring at Outfall 001:

1. General Requirements and Sample Frequency

- a. The permittee shall monitor for net Total Suspended Solids (TSS) at Outfall 001 twice per month all the time. Samples shall be collected from:
 - i. Cooling water intake from the Schuylkill River.
 - ii. Cooling water from the Perkiomen Creek if this makeup water source is being used during the sampling events.
 - iii. The discharge through Outfall 001.
- b. 24-hour time proportional composite samples shall be collected either using a compositor that collects aliquots at evenly spaced intervals or by collecting grab samples every two hours.
- c. The average flow rates shall be collected for each sample location during each sample event.

2. Calculations

- a. The TSS samples collected shall be designated as:
 - i. PTSS = TSS representative of cooling water from Perkiomen Creek (mg/l)
 - ii. STSS = TSS representative of cooling water from the Schuylkill River (mg/l)
 - iii. DTSS = TSS representative of Outfall 001 discharge (mg/l)
- b. The flow rate sampling locations shall be designated as:
 - i. PQ = Flow rate from Perkiomen Creek makeup water (MGD)
 - ii. SQ = Flow rate from Schuylkill River makeup water (MGD)
 - iii. DQ = Discharge flow rate through outfall 001 (MGD)

- c. The net TSS concentration shall be calculated as:

$$\text{NET TSS} = \frac{(\text{DTSS} * \text{DQ}) - [(\text{PTSS} * \text{PQ}) + (\text{STSS} * \text{SQ})]}{\text{DQ}} = \text{mg/l}$$

- d. The net TSS mass loading shall be calculated as:

$$\text{NET TSS} = (\text{DTSS} * \text{DQ}) - (\text{ }) \text{PTSS} * \text{PQ} (+) \text{STSS} * \text{SQ} (\text{ }) = \text{lbs/day}$$

3. Reporting

The permittee shall submit the results of all bimonthly TSS monitoring and net calculations to DEP in an annual report, due within 60 days after the completion of each calendar year, and complete report during the next permit renewal application.

- U. 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.
- V. The permittee shall monitor effluent TDS at Outfall 001, at a frequency twice a month for 24 months. The effluent data will be used to demonstrate that the discharge satisfies Water Quality Regulations (WQRs) as per Section 3.10.4.D.2 of Delaware River Basin Commission (DRBC) and/or Specific Water Quality Criteria of PA Code Title 25, Chapter 93.7 at public Water supply intake. If permittee cannot satisfy the DRBC's WQRs requirements, a TDS determination from the DRBC will be required. Permit will be amended if review of data determines need of effluent limit. This requirements is consistence with TDS requirements included in the DRBC docket no.D-1969-210 CP13.
- W. Monitoring of outfall 001 for 1, 4-Dioxane shall be performed quarterly for a period of one year from the effective date of permit issuance. If one or more samples indicate that 1, 4-Dioxane is present above 10 ug/l, then additional quarterly sampling shall continue for the duration of the permit. Otherwise no additional sampling is required.

II. CHEMICAL ADDITIVES

(A) The additive(s) and usage rate(s) currently approved are as follows:

<u>Name</u>	<u>Usage Rate (lbs/day)</u>	
	<u>Average Monthly</u>	<u>Maximum Daily</u>
GE Inhibitor AZ 8104	100	1,500
Nalco Products 3D TRASAR 3DT197	225	1,800
Nalco Products 3D TRASAR 3DT199	450	2,000
Nalco Products 3D TRASAR 3DT198	7	15
Nalco H550	150	1,000
Nalco Products 3DT120 <u>or</u> 3DT121	2,000	3,000
Nalco Products SURE COOL 1393	240	320
Nalco Products 77352NA	1	10
Nalco Products 8136	120	200
Nalco Products 3D TRASAR 3DT289	10	50
Nalco Products 8344	600	600
Nalco Products RUSTPHREE 73924	300	300
Nalco Products NALCLEAN 2568 PULV	112	450
Nalco Products 73310	126	252
Nalco Products 73551	1,500	3,000
GE- Betz Spectrus DT1400*	4,790	9,520
GE-Betz Polyfloc AP1120	1	2
Nalco Products OPTIMER 7193 PLUS	2.0	3.5
Applied Biochemist Aquashade	160	900
Ammonium Sulfate	15	20
Sodium Metabisulfite	5	10
Hydrogen Peroxide	5	95
Sodium Sulfite	21	21
Trisodium Phosphate	51	51
Disodium Phosphate	51	51
Nalco Products H-150M	120	810
Nalco Products 7468	450	900
Nalco 3DT138	404	3,686

Nalco 7384	50	800
Nalco Products 3DT177	2,500	3,750
NALCO 3DT230	10	50
Nalco Products 1315*	14,370	28,650
GE-Betz Hypersperse MDC150	9	18
GE Klairaid IC1172	15	125
Hydrochloric Acid	pH limit will govern usage rate	
Sodium Hydroxide	pH limit will govern usage rate	
Sodium Bromide	TRO limit of 0.2 mg/l will govern usage rate	
Sulfuric Acid	pH limit will govern usage rate	
Sodium Hypochlorite	TRO limit of 0.2 mg/l will govern usage rate	
NALCO CB70	TRO limit of 0.2 mg/l will govern usage rate	

*Only GE-Betz Spectrus DT1400 or NALCO 1315 will be used at a time.

- B. Chemical additives to control corrosion, scaling, algae, slime, fouling or oxygen, etc., and blow down discharge rates shall be managed by the permittee to ensure that toxic effects in the receiving stream are prevented. These also include substances/compounds added to the wastewater such as polymers, water softeners, flocculants, coagulants, emulsion breakers, dispersants, and oxygen scavengers.
- C. Usage rates shall be consistent with the quantities and rates approved by the DEP and shall be limited to the minimum amount necessary to accomplish the intended purposes of chemical addition.
- D. Whenever a change in chemical additive or increase in usage rates is desired by the permittee, follow procedure listed below.

(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.depweb.state.pa.us/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" 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-BPNPSM0486) to DEP's Central Office, Bureau of Point and Non-Point Source Management (BPNPSM), Division of Water Quality Standards, 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 BPNPSM 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" (3800-FM-BPNPSM0487) 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-BPNPSM0439) 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.
- E. Chemicals used for cooling tower maintenance shall not include any of the 126 priority pollutants listed in 40 CFR Part 423: Steam Electric Power Generating Point Sources, Appendix A, with the exception of Total Chromium and Total Zinc. As allowed by 40 CFR §423.13(d)(3), compliance with the limitations for the 126 priority pollutants may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.

III. COOLING WATER INTAKE STRUCTURES

The purpose of Section 316(b) of the Clean Water Act (CWA) is to establish the best technology available (BTA) for minimizing adverse environmental impacts associated with the use of cooling water intake structures.

As the operator of a facility with an existing cooling water intake structure, the following conditions apply:

- A. The permittee shall continue to operate and maintain the cooling water intake structures in a manner that reduces the intake flow commensurate with closed cycle recirculating cooling.
- B. The permittee shall minimize make-up water to the fullest extent practicable through the use of closed cycle cooling.
- C. Any changes to the location, design, or capacity of the intake structure(s) must be reviewed and approved, in advanced, by DEP.
- D. The permittee shall maintain and operate the cooling water intake structures in a manner that keeps debris from blocking the screen.
- E. The permittee shall continue to minimize adverse environmental impact due to impingement at the cooling water intake structure on the Perkiomen Creek through its design velocity of no more than 0.5 feet per second.
- F. The permittee must maintain and retain data and other records for any information developed pursuant to section 316 (b) for a minimum of ten years.
- G. The location, design, construction or capacity of the intake structure(s) may not be altered without prior approval of the Department.
- H. Nothing in this permit authorizes the take for the purposes of the permittee's compliance with the Endangered Species Act.

- I. In accordance with the new rule, Exelon will submit applicable §122.21(r) reports for Limerick when applying for their subsequent NPDES Permit renewal.

IV. WHOLE EFFLUENT TOXICITY (WET)

A. General Requirements

1. The permittee shall conduct chronic WET tests as specified in this section. The permittee shall collect discharge samples and perform WET tests to generate chronic survival/reproduction data for the cladoceran, *Ceriodaphnia dubia* and chronic survival/growth data for the fathead minnow, *Pimephales promelas*.
2. Samples shall be collected at Outfall 001 in accordance with paragraph E.
3. The permittee shall perform testing using the following dilution series: 4%, 8%, 16%, 58%, and 100% effluent, with a control, where 16% is the facility-specific Target In-Stream Waste Concentration (TIWC).
4. The determination of whether a test endpoint passes or fails shall be made using DEP's WET Analysis Spreadsheet (available at www.depweb.state.pa.us/wett) by comparing replicate data for the control with replicate data for the TIWC dilution or any dilution greater than the TIWC.
5. The permittee shall submit only valid WET test results to DEP.

B. Test Frequency and Reporting

1. WET testing shall be conducted quarterly, beginning within 30 days of the permit effective date. Tests shall be completed within calendar quarters, i.e., one test each during the periods of January 1 – March 31, April 1 – June 30, July 1 – September 30, and October 1 – December 31. A complete WET test report shall be submitted to the DEP regional office that issued the permit within 30 days of test completion. A complete WET test report submission shall include the information contained in paragraph H, below.
2. If a test failure is determined for any endpoint during quarterly monitoring, the permittee shall initiate a re-test for the species with the failure, at a minimum, within 45 days of test completion. All endpoints for the species shall be evaluated in the re-test. The results of the re-test shall be submitted to the DEP regional office that issued the permit.
4. If a passing result is determined for all endpoints in a re-test, the permittee continue with quarterly monitoring, as applicable.
5. If there is a failure for one or more endpoints in a re-test, the permittee shall continue quarterly WET testing for both species. The results of all tests shall be submitted to the DEP regional office that issued the permit. In addition, the permittee shall initiate a Phase I Toxicity Reduction Evaluation (TRE) as specified in paragraph C, below.
6. The permittee must report the results of each test endpoint that has a WET limit in Part A of this permit on the Discharge Monitoring Report (DMR). Test results shall be reported on the DMR in terms of acute or chronic Toxicity Units (TU_a or TU_c), where TU_a is used for acute tests and TU_c is used for chronic tests. If DEP's WET Analysis Spreadsheet indicates a passing result for an endpoint, report the value obtained from the expression "1/TIWC", which is equivalent to the permit limit. If the Spreadsheet indicates a failure, report the value obtained from the expression "> 1/TIWC". If a dilution higher than the TIWC dilution is used for the comparison with the control, report the value obtained from the expression "1/dilution". For example, an acute test endpoint failure at a TIWC dilution of 50% would be reported as "> 2.0 TU_a" (1/0.5).
7. The permittee shall attach a completed WET Analysis Spreadsheet for the latest four consecutive WET tests to the NPDES permit renewal application that is submitted to DEP at least 180 days prior to the permit expiration date.

C. Phase I Toxicity Reduction Evaluation (TRE)

1. The Phase I TRE trigger is one WET endpoint failure followed by a re-test that confirms the failure for the same species. When the Phase I TRE process is triggered, quarterly WET testing shall be continue. The Phase I TRE may include a Toxicity Identification Evaluation (TIE) if the permittee cannot immediately identify the possible causes of the effluent toxicity and the possible sources of the causative agents.
2. The permittee shall, within one year following the Phase I TRE trigger, submit a Phase I TRE report to the DEP regional office that issued the permit. The Phase I TRE shall be conducted in accordance with EPA's guidance, "Toxicity Reduction Evaluation for Municipal Wastewater Treatment Plants" (EPA/833B-99/002), "Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations" (EPA/600/2-88/070), and other relevant EPA guidance, as applicable. If a TIE is conducted as part of the Phase I TRE, it shall conform to EPA's guidance, "Methods for Aquatic Toxicity Identification Evaluations Phase I" (EPA/600/6-91/003), "Phase II" (EPA/600/R-92/080), "Phase III" (EPA/600/R-92/081) and other relevant EPA guidance. The Phase I TRE report shall be submitted with the fourth quarterly WET test report that is completed following the Phase I TRE trigger. The TRE report shall include all activities undertaken to identify the cause(s) and source(s) of toxicity and any control efforts.
3. If all four quarterly WET tests produce passing results for all endpoints during the Phase I TRE process, performances of a Phase II TRE is not required and continue with quarterly WET testing in accordance with paragraph B.1
4. If the four WET tests produce at least one failing result during the Phase I TRE process, the permittee shall continue quarterly WET monitoring for both species and initiate a Phase II TRE in accordance with paragraph D. In this case, the Phase I TRE must include a schedule for completion of the Phase II TRE. The schedule must include interim milestones and a final completion date not to exceed two years from the initiation of the Phase II TRE. The permittee shall implement the Phase II TRE in accordance with the schedule unless DEP issues written approval to modify the schedule or cease performance of the Phase II TRE.
5. Re-tests during the TRE process are required for invalid tests but are optional and at the discretion of the permittee for valid tests. The results of all re-tests must be submitted to the DEP regional office that issued the permit along with the required elements in paragraph H.

D. Phase II Toxicity Reduction Evaluation (TRE)

1. The Phase II TRE trigger is one WET endpoint failure during performance of the Phase I TRE. A Phase II TRE, if required, shall conform to EPA's guidance, "Toxicity Reduction Evaluation for Municipal Wastewater Treatment Plants" (EPA/833B-99/002), "Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations" (EPA/600/2-88/070), and other relevant EPA guidance, as applicable. A Phase II TRE evaluates the possible control options to reduce or eliminate the effluent toxicity and the implementation of controls.
2. Once initiated, the Phase II TRE must continue until the source(s) of toxicity are controlled as evidenced by four consecutive WET test passing results for all endpoints, and a final TRE report must be submitted on or before the date specified in the schedule, unless otherwise approved by DEP in writing.

E. Sample Collection

For each acute testing event, a 24-hour flow-proportioned or time weighted composite sample shall be collected. For each chronic testing event, three 24-hour flow-proportioned or time weighted composite samples shall be collected over a seven day exposure period. The samples must be collected at a frequency of not greater than every two hours and must be flow-proportioned or time weighted. The

samples must be collected at the permit compliance sampling location. Samples must be analyzed within 36 hours from the end of the compositing period and must be placed on ice and held at $\leq 6^{\circ}\text{C}$. Refer to the sample handling and preservation regulations set forth in 40 CFR 136, 25 Pa. Code Chapter 252, The NELAC Institute (TNI) Standard, and the appropriate EPA methods.

F. Test Conditions and Methods

Laboratories must be accredited by the DEP Laboratory Accreditation Program in order to perform and report WET tests for NPDES permit compliance. Laboratories must be either State or NELAP accredited.

1. Acute tests shall be completed in accordance with EPA's "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA-821-R-02-012, latest edition). Forty eight (48) hour static non-renewal tests shall be used.
2. Chronic tests shall be completed in accordance with EPA's "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (EPA-821-R-02-013, latest edition). Seven (7) day tests shall be used with renewal every 24 hours.
3. The quality assurance and control (QA/QC) requirements and test acceptability standards specified in EPA's test methods and the requirements set forth in 25 Pa Code Chapter 252 or the TNI Standard must be followed
4. If the permittee or its accredited laboratory determines that QA/QC requirements and/or test acceptability standards have not been met, a re-test shall be initiated within 30 days. Original test data must be maintained by the laboratory and be submitted to DEP upon request. The justification for a re-test must be clearly documented and kept on file with the sample results.

G. Chemical Analyses

Chemical analyses must follow the requirements of the EPA methods and applicable State and/or Federal regulations.

1. Chemical analysis on effluent samples shall include pH, Conductivity, Total Alkalinity, Total Hardness, Total Residual Chlorine, Total Ammonia (Unionized Ammonia), Dissolved Oxygen and temperature. Chemical analyses as described in the EPA Methods (above) shall be performed for each sampling event, including each new batch of dilution water and each testing event.
2. In addition to the chemical analyses required above, those parameters listed in Part A of the NPDES permit for the outfall(s) tested shall be analyzed concurrently with the WET test by using the method(s) specified in the permit.

H. WET Report Elements

WET test reports that are submitted to DEP must include the requirements identified in 25 Pa. Code § 252.401(j)(1) – (15) or in the TNI Standard, or equivalent, as well as the following information:

1. A general test description, including the origin and age of test organisms, dates and results of reference toxicant tests, light and temperature regimes, and other documentation that QA and test acceptability criteria as specified in EPA's methods and DEP's QA Summaries have been met.
2. A description of sample collection procedures and sampling location.
3. Name(s) of individual(s) collecting and transporting samples, including sample renewals, and the date(s) and time(s) of sample collection.
4. All chemical and physical data including laboratory quantitation limits and observations made on the species. The hardness shall be reported for each test condition.

5. Copies of raw data sheets and/or bench sheets with data entries and signatures.
6. When effluents are dechlorinated, dechlorination procedures must be described and if applicable a thiosulfate control used in addition to the normal dilution water control. If the thiosulfate control results are significantly different from the normal control, as determined using DEP's WET Analysis Spreadsheet, the thiosulfate control shall be used in the spreadsheet for comparison with the TIWC condition. The WET report must specify which control was used to determine whether the test result is pass or fail.
7. A description of all observations or test conditions that may have affected the test outcome.
8. Control charts for the species tested regarding age, temperature test range, mortality data and all reference toxicant tests.
9. A completed WET test summary report (3800-FM-BPNPSM0485).
10. A DEP WET Analysis Spreadsheet printout that provides control and TIWC replicate data and displays the outcome of the test (pass or fail) for each endpoint tested.

WETT reports shall be submitted to the DEP regional office that issued the permit and, for discharges to the Delaware River basin, the Delaware River Basin Commission (DRBC).

V. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

- A. The permittee is authorized to discharge non-polluting stormwater from its site, alone or in combination with other wastewaters, through the outfalls listed in Part A of the permit. Monitoring requirements and effluent limitations for these outfalls are specified in Part A of this permit, if applicable.
- B. Preparedness, Prevention and Contingency (PPC) Plan

The permittee must 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. For existing facilities, the PPC Plan must be developed prior to permit issuance. For new facilities, the PPC Plan must be submitted to DEP no later than prior to startup of facility operation.

1. 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.
2. The PPC Plan must describe preventative measures and best management practices (BMPs) that will be implemented to reduce or eliminate pollutants from coming into contact with stormwater resulting from routine site activities and spills.
3. The PPC Plan must address actions that will be taken in response to on-site spills or other pollution incidents.
4. 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).
5. The PPC Plan must address security measures to prevent accidental or intentional entry which could result in an unintentional discharge of pollutants.
6. The PPC Plan must include a plan for training employees and contractors on pollution prevention, BMPs, and emergency response measures.

7. 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.

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

The PPC Plan shall be evaluated and if necessary updated on an annual basis, at a minimum, and when one or more of the following occur:

- Applicable DEP or federal regulations are revised, or this permit is revised;
- The Plan fails in an emergency;
- There is a change in design, industrial process, operation, maintenance, or other circumstances, 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;
- The list of emergency coordinators or equipment changes; or
- When notified in writing by DEP.

All updates must be kept on-site and be made available to DEP upon request.

C. Minimum Required BMPs

In addition to BMPs identified in the PPC Plan, the permittee shall implement the following minimum BMPs relating to stormwater pollution prevention:

1. If applicable, post-construction stormwater BMPs that are required under 25 Pa. Code Chapter 102 must be maintained.
2. For industrial facilities, 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.
3. Store chemicals in secure and covered areas on impervious surfaces away from storm drains.
4. Efficiently use herbicides for weed control. Where practicable, use the least toxic herbicide that will achieve pest management objectives. Do not apply during windy conditions.
5. Do not wash parts or equipment over impervious surfaces that wash into storm drains

D. Annual Inspection and Compliance Evaluation

On an annual basis, the permittee shall conduct an annual inspection of each outfall identified in paragraph A and record the results on the "Annual Inspection Form for NPDES Permits for Discharges of Stormwater Associated with Industrial Activities" (3800-PM-WSFR0083v). The form shall be retained on-site and be made available to DEP upon request.

Areas contributing to a stormwater discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. BMPs in the PPC Plan and required by this permit shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of this permit or whether additional control measures are needed.

E. Stormwater Sampling Requirements

If stormwater sampling is required in Part A of this permit, the following requirements apply:

1. The permittee shall record stormwater sampling event information on the "Additional Information for the Reporting of Stormwater Discharge Monitoring" form (3800-PM-WSFR0083t) and submit the form as an attachment to the DMR.
2. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches 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.
3. Grab samples shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is not possible, a grab sample can be taken during the first hour of the discharge, in which case the discharger shall provide an explanation of why a grab sample during the first 30 minutes was not possible.
4. When a facility has two or more outfalls that may reasonably be believed to discharge substantially identical effluents, based on a consideration of features and activities within the area drained by the outfall, the permittee may sample one such outfall and report that the quantitative data also applies to the substantially identical outfalls.

Outfall 002 has been determined to be representative of Outfalls 004, 022 and 024. Outfall 008 has been determined to be representative of Outfalls 006, 007, and 009. Outfall 019 has been determined to be representative of Outfalls 013, 014, 015, 016, 017 and 018.

The following describes the outfall location and drainage areas:

Outfall 002, Latitude 40° 13' 19.7", Longitude 75° 35' 14.2", River Mile Index 0.23, Stream Code 01640, which receives wastewater from area around former sewage treatment plant and service area.

Outfall 004, Latitude 40° 13' 20.9", Longitude 75° 35' 9.5", River Mile Index 0.28, Stream Code 01640, which receives wastewater from fuel storage area.

Outfall 022, Latitude 40° 13' 18.3", Longitude 75° 35' 16.0", River Mile Index 0.19, Stream Code 01640, which receives wastewater from wastewater treatment plant and service road.

Outfall 006, Latitude 40° 13' 23.7", Longitude 75° 35' 21.5", River Mile Index 48.15, Stream Code 00833 which receives wastewater from maintenance area of metal shop and hardware.

Outfall 007, Latitude 40° 13' 24.5", Longitude 75° 35' 22.4", River Mile Index 48.28, Stream Code 00833 which receives wastewater from area around health physics building, hardware shop and offices.

Outfall 008, Latitude 40° 13' 26.5", Longitude 75° 35' 25.1", River Mile Index 48.32, Stream Code 00833 which receives wastewater from area around health physics and electrical substation.

Outfall 009, Latitude 40° 13' 28.8", Longitude 75° 35' 26.3", River Mile Index 48.34, Stream Code 00833 which receives wastewater from area around control building, instrument shop and storage.

Outfall 013, Latitude 40° 13' 23", Longitude 75° 35' 07", River Mile Index 0.19, Stream Code 01640, which receives storm water from service roads and parking lots.

Outfall 014, Latitude 40° 13' 26", Longitude 75° 35' 04", River Mile Index 0.19, Stream Code 01640, which receives storm water from service roads and parking lots.

Outfall 015, Latitude 40° 13' 27", Longitude 75° 35' 04", River Mile Index 0.19, Stream Code 01640, which receives storm water from service roads and parking lots.

Outfall 016, Latitude 40° 13' 33", Longitude 75° 34' 57", River Mile Index 0.19, Stream Code 01640, which receives storm water from service roads and parking lots.

Outfall 017, Latitude 40° 13' 33", Longitude 75° 33' 54", River Mile Index 0.19, Stream Code 01640, which receives storm water from service roads and parking lots.

Outfall 018, Latitude 40° 13' 35", Longitude 75° 34' 54", River Mile Index 0.19, Stream Code 01640, which receives storm water from yard drains..

Outfall 019, Latitude 40° 13' 32", Longitude 75° 34' 50", River Mile Index 0.19, Stream Code 01640, which receives storm water from service roads and parking lots.

Outfall 024, Latitude 40° 13' 17.6", Longitude 75° 35' 15.8", River Mile Index 0.19, Stream Code 01640, which receives storm water from service roads neat wastewater treatment plant .

VI. PCB MONITORING

- A. On April 7, 2007, the U.S. Environmental Protection Agency (EPA), Region III, established a Total Maximum Daily Load (TMDL) for Polychlorinated Biphenyl (PCB) for the Schuylkill River, which was listed on Pennsylvania's 1996 303(d) list of impaired streams as impaired due to the presence of elevated PCB concentrations found in fish tissue. PCBs are a group of synthetic chemicals that consist of 209 individual compounds (known as congeners). The Schuylkill River's PCB TMDL was established using a water quality criterion of 0.044 ng/L for PCBs.
- B. Implementation of the TMDL requires that permitted facilities that discharge directly to the Schuylkill River conduct monitoring for PCBs using analytical Method 1668A. The results of PCB monitoring will be evaluated to determine a need to develop and implement a PCB Waste Minimization and Reduction Program, also known as Pollution Minimization Plan (PMP). For information on how to develop a PMP visit Delaware River Basin Commission's website at http://www.state.nj.us/drbc/PMP_info.htm.
- C. Implementation of the TMDL will be completed in two phases. Phase I implementation of the TMDL requires that this facility collect and analyze two samples for PCBs utilizing Method 1668A during the first 12 months of this permit. Phase II implementation of the TMDL will involve the development and implementation of a PMP based on the PCB monitoring results. This facility is required to collect and analyze two samples for PCBs utilizing Method 1668A within 12 months from the issuance of this permit. One sample shall be collected during a wet weather flow period; the second sample shall be collected during a dry flow period. The samples shall be collected from Outfall 001. Sample collection techniques, identification analytical approaches and reporting requirements can be found at http://www.state.nj.us/drbc/PCB_info.htm.
- D. Within 15 months from the issuance of this permit, the facility shall submit the results of the PCB monitoring to DEP at the address listed below. Upon review of the data collected in Phase I, individual facilities will be directed by the DEP to commence Phase II involving development and implementation of a PMP.

PA Department of Environmental Protection
Southeast Regional Office
Water Management Program
Operations Section
2 East Main Street
Norristown, PA 19401