



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

**NPDES PERMIT NO: PA0009024  
Amendment No. 2**

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

**Global Tungsten & Powders Corp.  
Hawes Street  
Towanda, PA 18848**

is authorized to discharge from a facility known as **Global Tungsten & Powders Corp**, located in **North Towanda Township, Bradford County**, to **Susquehanna River** in Watershed(s) **4-C** 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**     **MARCH 1, 2012**    

**THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON**     **FEBRUARY 28, 2017**    

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**     **FEBRUARY 2, 2012**      
**DATE PERMIT AMENDMENT ISSUED**     **JUNE 18, 2014**    

**ISSUED BY**     /s/      
**Thomas M. Randis**  
**Clean Water Program Manager**  
**Northcentral Regional Office**

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

I. A. For Outfall 001, Latitude 41° 46' 53", Longitude 76° 26' 29", River Mile Index 274, Stream Code 6685

Receiving Waters: Susquehanna River

Type of Effluent: Treated Industrial Wastewater

1. The permittee is authorized to discharge during the period from Permit Effective Date through February 28, 2017.
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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	Continuous	Metered
Total Suspended Solids	288	589	XXX	Report	Report	99	1/day	24-Hr Composite
Total Dissolved Solids	119,157 Annl Avg	135,790	XXX	Report	Report	XXX	2/week	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15	XXX	30	2/week	Grab
Ammonia-Nitrogen	1,363	3,097	XXX	Report	Report	469	1/day	24-Hr Composite
Total Arsenic	5.7	14.3	XXX	Report	Report	2.5	2/week	24-Hr Composite
Total Cobalt	12.5	28.4	XXX	Report	Report	4.3	2/week	24-Hr Composite

Outfall 001, Continued (from Permit Effective Date through February 28, 2017)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)			Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type	
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum			Instant. Maximum
Total Copper	5.1	13.4	XXX	Report	Report	2.2	2/week	24-Hr Composite
Fluoride	183	332	XXX	Report	Report	63	2/week	24-Hr Composite
Dissolved Iron	XXX	XXX	XXX	XXX	XXX	7.0	1/month	Grab
Total Lead	1.1	2.7	XXX	Report	Report	0.38	2/week	24-Hr Composite
Total Molybdenum	228	456	XXX	Report	Report	79	2/week	24-Hr Composite
Total Nickel	16.0	35.9	XXX	Report	Report	5.5	2/week	24-Hr Composite
Total Selenium	2.2	5.5	XXX	Report	Report	0.8	2/week	24-Hr Composite
Total Tantalum	3.4	3.4	XXX	Report	Report	1.2	2/week	24-Hr Composite
Total Tungsten	463	1,041	XXX	Report	Report	161	2/week	24-Hr Composite
Total Zinc	4.5	11.4	XXX	Report	Report	1.9	2/week	24-Hr Composite

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

at Outfall 001

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

I. B. For IMP 101, Latitude 41° 47' 24", Longitude 76° 26' 28", River Mile Index N/A, Stream Code N/A

Receiving Waters: N/A

Type of Effluent: Pretreated Rare Earth Metals Recovery Process industrial wastewater

1. The permittee is authorized to discharge during the period from Permit Effective Date through February 28, 2017.
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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Metered
Total Suspended Solids	Report	Report	XXX	31.0	60.0	77.5	1/month	24-Hr Composite
Oil and Grease	Report	Report	XXX	50.2	205	255	1/month	Grab
Total Antimony	Report	Report	XXX	4.04	7.46	10.10	1/month	24-Hr Composite
Total Arsenic	Report	Report	XXX	0.104	0.162	0.260	1/month	24-Hr Composite
Total Cadmium	Report	Report	XXX	0.0962	0.474	0.592	1/month	24-Hr Composite
Total Chromium	Report	Report	XXX	3.07	15.5	19.3	1/month	24-Hr Composite
Total Cobalt	Report	Report	XXX	0.124	0.192	0.310	1/month	24-Hr Composite
Total Copper	Report	Report	XXX	1.06	4.14	5.17	1/month	24-Hr Composite
Total Lead	Report	Report	XXX	0.283	1.32	1.65	1/month	24-Hr Composite

**IMP 101, Continued (from Permit Effective Date through February 28, 2017)**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Mercury (µg/L)	Report	Report	XXX	0.739	2.34	5.85	1/month	24-Hr Composite
Total Nickel	Report	Report	XXX	1.45	3.95	4.93	1/month	24-Hr Composite
Total Silver	Report	Report	XXX	0.0351	0.120	0.150	1/month	24-Hr Composite
Total Tin	Report	Report	XXX	0.120	0.409	1.022	1/month	24-Hr Composite
Total Titanium	Report	Report	XXX	0.0618	0.0947	0.1545	1/month	24-Hr Composite
Total Vanadium	Report	Report	XXX	0.0662	0.218	0.272	1/month	24-Hr Composite
Total Zinc	Report	Report	XXX	0.641	2.87	3.58	1/month	24-Hr Composite

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

at Internal Monitoring Point 101

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

I. C. For Outfall 002, Latitude 41° 46' 57", Longitude 76° 26' 29", River Mile Index 274.1, Stream Code 6685

Receiving Waters: Susquehanna River

Type of Effluent: Non-contact Cooling Water, Steam Condensate and Stormwater

1. The permittee is authorized to discharge during the period from Permit Effective Date through February 28, 2017.
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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.) <sup>(5)</sup>	XXX	XXX	6.0	XXX	XXX	9.0	Continuous	Metered
Total Dissolved Solids <sup>(3)</sup>	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Oil and Grease <sup>(3)</sup>	XXX	XXX	XXX	15	XXX	30	1/week	Grab
Ammonia-Nitrogen <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab
Dissolved Iron <sup>(3)</sup>	XXX	XXX	XXX	XXX	XXX	7.0	1/month	Grab
Total Molybdenum <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab

**Outfall 002, Continued (from Permit Effective Date through February 28, 2017)**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nickel <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab

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

at Outfall 002

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

I. D. For Outfall 003, Latitude 41° 47' 12", Longitude 76° 26' 36", River Mile Index 274.4, Stream Code 6685

Receiving Waters: Susquehanna River

Type of Effluent: Non-contact Cooling Water, Steam Condensate and Stormwater

1. The permittee is authorized to discharge during the period from Permit Effective Date through February 28, 2017.
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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.) <sup>(5)</sup>	XXX	XXX	6.0	XXX	XXX	9.0	Continuous	Metered
Total Dissolved Solids <sup>(3)</sup>	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Oil and Grease <sup>(3)</sup>	XXX	XXX	XXX	15	XXX	30	1/week	Grab
Ammonia-Nitrogen <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab
Dissolved Iron <sup>(3)</sup>	XXX	XXX	XXX	XXX	XXX	7.0	1/month	Grab
Total Molybdenum <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab



**Outfall 003, Continued (from Permit Effective Date through February 28, 2017)**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nickel <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab

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

at Outfall 003

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

I. E. For Outfall 004, Latitude 41° 47' 13", Longitude 76° 26' 36", River Mile Index 274.5, Stream Code 6685

Receiving Waters: Susquehanna River

Type of Effluent: Non-contact Cooling Water, Steam Condensate and Stormwater

1. The permittee is authorized to discharge during the period from Permit Effective Date through February 28, 2017.
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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.) <sup>(5)</sup>	XXX	XXX	6.0	XXX	XXX	9.0	Continuous	Metered
Total Dissolved Solids <sup>(3)</sup>	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Oil and Grease <sup>(3)</sup>	XXX	XXX	XXX	15	XXX	30	1/week	Grab
Ammonia-Nitrogen <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab
Dissolved Iron <sup>(3)</sup>	XXX	XXX	XXX	XXX	XXX	7.0	1/month	Grab
Total Molybdenum <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab

**Outfall 004, Continued (from Permit Effective Date through February 28, 2017)**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nickel <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc <sup>(4)</sup>	XXX	Report	XXX	XXX	Report	XXX	1/6 months	Grab

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

at Outfall 004

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS  
(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.
- (3) Samples shall be collected during dry weather when there is no influence from storm events.
- (4) 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.  
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 impracticable, a grab sample can be taken during the first hour of the discharge and the discharger shall provide, using DEP's form Additional Information for the Reporting of Stormwater Discharge Monitoring (3800-PM-WSFR0083t), available on DEP's Web site, a description of why a grab sample during the first 30 minutes was impracticable.
- (5) For compliance purposes, pH exceedances which are shorter than 15 minutes in duration and are within the range of 5.0-10.0 Std. Units, are not considered to be violations of this effluent limitation and need not be reported. This exemption is valid for only four exceedance events per month.

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

I. F. For Outfall 001, Latitude 41° 46' 53", Longitude 76° 26' 29", River Mile Index 274, Stream Code 6685

**Discharging to Susquehanna River**

which receives wastewater from Industrial Wastewater Treatment Plant

1. The permittee is authorized to discharge during the period from Permit Effective Date through September 30, 2012.
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 <sup>(1)</sup>	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Ammonia---N	Report	Report		Report		1/week	24-Hr Composite
Kjeldahl---N	Report			Report		1/week	24-Hr Composite
Nitrate-Nitrite as N	Report			Report		1/week	24-Hr Composite
Total Nitrogen	Report	Report		Report		1/month	Calculation
Total Phosphorus	Report	Report		Report		1/week	24-Hr Composite
Net Total Nitrogen	Report	Report				1/month	Calculation
Net Total Phosphorus	Report	Report				1/month	Calculation

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

at Outfall 001

Footnotes:

- (1) See Part C for Chesapeake Bay Requirements.
- (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 required.

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

I. G. For Outfall 001, Latitude 41° 46' 53", Longitude 76° 26' 29", River Mile Index 274, Stream Code 6685

**Discharging to Susquehanna River**

which receives wastewater from Industrial Wastewater Treatment Plant

1. The permittee is authorized to discharge during the period from October 1, 2012 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 <sup>(1)</sup>	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Ammonia---N	Report	Report		Report		1/week	24-Hr Composite
Kjeldahl---N	Report			Report		1/week	24-Hr Composite
Nitrate-Nitrite as N	Report			Report		1/week	24-Hr Composite
Total Nitrogen	Report	Report		Report		1/month	Calculation
Total Phosphorus	Report	Report		Report		1/week	24-Hr Composite
Net Total Nitrogen	Report	600515				1/month	Calculation
Net Total Phosphorus	Report	1577				1/month	Calculation

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

at Outfall 001

Footnotes:

- (1) See Part C for Chesapeake Bay Requirements.
- (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 required.

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

I. H. For Outfall 002, Latitude 41° 46' 57", Longitude 76° 26' 29", River Mile Index 274.1, Stream Code 6685

**Discharging to Susquehanna River**

which receives non-contact cooling water, steam condensate and stormwater

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 <sup>(1)</sup>	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Ammonia---N	Report	Report		Report		1/quarter	24-Hr Composite
Kjeldahl---N	Report			Report		1/quarter	24-Hr Composite
Nitrate-Nitrite as N	Report			Report		1/quarter	24-Hr Composite
Total Nitrogen	Report	Report		Report		1/quarter	Calculation
Total Phosphorus	Report	Report		Report		1/quarter	24-Hr Composite

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

at Outfall 002

Footnotes:

- (1) See Part C for Chesapeake Bay Requirements.
- (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 required.

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

I. I. For Outfall 003, Latitude 41° 47' 12", Longitude 76° 26' 36", River Mile Index 274.4, Stream Code 6685

**Discharging to Susquehanna River**

which receives non-contact cooling water, steam condensate and stormwater

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 <sup>(1)</sup>	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Ammonia---N	Report	Report		Report		1/quarter	24-Hr Composite
Kjeldahl---N	Report			Report		1/quarter	24-Hr Composite
Nitrate-Nitrite as N	Report			Report		1/quarter	24-Hr Composite
Total Nitrogen	Report	Report		Report		1/quarter	Calculation
Total Phosphorus	Report	Report		Report		1/quarter	24-Hr Composite

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

at Outfall 003

Footnotes:

- (1) See Part C for Chesapeake Bay Requirements.
- (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 required.



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

I. J. For Outfall 004, Latitude 41° 47' 13", Longitude 76° 26' 36", River Mile Index 274.5, Stream Code 6685

**Discharging to Susquehanna River**

which receives non-contact cooling water, steam condensate and stormwater

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 <sup>(1)</sup>	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Ammonia---N	Report	Report		Report		1/quarter	24-Hr Composite
Kjeldahl---N	Report			Report		1/quarter	24-Hr Composite
Nitrate-Nitrite as N	Report			Report		1/quarter	24-Hr Composite
Total Nitrogen	Report	Report		Report		1/quarter	Calculation
Total Phosphorus	Report	Report		Report		1/quarter	24-Hr Composite

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

at Outfall 004

Footnotes:

- (1) See Part C for Chesapeake Bay Requirements.
- (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 required.

## 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 the chemicals that are used to control corrosion, algae, slime, fouling, oxygen or other blow down discharges in systems within a facility that might be present in its wastewater discharge. Other chemicals that would be included in this category include by are not limited to polymers, water softeners, flocculants, coagulants, emulsion breakers, dispersants, other oxygen scavenger or possible known carcinogens.

*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 sewage 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 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.
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  
Clean Water Program  
208 West Third Street, Suite 101  
Williamsport, PA 17701-6448

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 BOD<sub>5</sub> 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 Title 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.3.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.3.b.

## II. PENALTIES AND LIABILITY

### A. Violations of Permit Conditions

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

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

### B. Falsifying Information

Any person who does any of the following:

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

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

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

#### C. Liability

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

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

#### D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (40 CFR 122.41(c))

### III. OTHER RESPONSIBILITIES

#### A. Right of Entry

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

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; (40 CFR 122.41(i)(1))
2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; (40 CFR 122.41(i)(2))
3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and (40 CFR 122.41(i)(3))
4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (40 CFR 122.41(i)(4))

#### B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (40 CFR 122.61(a))
2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:
  - a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (40 CFR 122.61(b)(1))

- b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; (40 CFR 122.61(b)(2))
  - c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section; and (40 CFR 122.61(b)(3))
  - d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code 92a.51 (relating to schedules of compliance) and other appropriate DEP regulations. (25 Pa. Code 92a.71)
3. In the event DEP does not approve transfer of this permit, the new owner or 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 the DEP at 717-787-6744 with questions related to annual fees.

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

<b>PART C</b>
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**I. CHESAPEAKE BAY SCHEDULE**

- A. **Timing For Effective Dates Of Effluent Limitations.** The following schedule applies to effluent limitations in this permit:

<u>Provision Containing Effluent Limitation</u>	<u>Effective Date</u>
Part A I.A through Part A I.E and Part A I.H through Part A I.J	Permit Effective Date through Permit Expiration
Part A I.F Part A I.G	Permit Effective Date through September 30, 2012 October 1, 2012 through Permit Expiration

The permittee shall achieve compliance with all other terms and conditions of this permit upon the effective date of the permit, unless otherwise specified.

- B. **Compliance Schedule.** The permittee shall be in compliance with effluent limitations for Nitrogen and Phosphorus contained in Part A I.G.2, or terminate this discharge, in accordance with the following schedule:

<u>Activity</u>	<u>Due Date</u>
1. TP source reduction – termination of halophosphate phosphor manufacturing	Completed
2. Request approval for addition of selected chemical for phosphorus removal	Completed
3. Order necessary equipment for chemical addition	Completed
4. Install chemical addition process	Completed
5. Construction or implementation progress reports	Quarterly Reports Due: January 31, 2012 & 2013, April 30, 2012 & 2013, July 31, 2012 & 2013, October 31, 2012
6. Compliance with effluent limitations	September 30, 2013

- C. No later than 14 calendar days following the date identified in the above schedule of compliance, the permittee shall submit to the Department a written notice of compliance or non-compliance with the specific schedule requirement(s) to:

Department of Environmental Protection  
Northcentral Regional Office  
Water Management Program  
Attn: Compliance Specialist  
208 W Third Street Suite 101  
Williamsport, PA 17701-6448

- D. Each notice of non-compliance, at a minimum, shall include the following information:
1. A description of the noncompliance.
  2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement.
  3. A description of any factors which tend to explain or mitigate the noncompliance.
  4. An estimate of the date that compliance with the elapsed schedule requirement will be achieved and an assessment of the probability that the next scheduled requirement will be met on time.



5. A revised schedule of compliance for Department approval.
- E. The permittee should contact the compliance specialist indicated in the event of anticipated non-compliance with any of a compliance schedule activities listed, seven (7) days prior to the due date of the activity.

## II. CHESAPEAKE BAY NUTRIENT REQUIREMENTS

The Annual Net Total Nitrogen (TN) and Annual Net Total Phosphorus (TP) Mass Load effluent limitations (Cap Loads) in Part A I.G are required in order to meet the downstream water quality standards of the State of Maryland, as required by 25 Pa. Code Chapter 92a, the federal Clean Water Act and implementing regulations. These effluent limitations do not reflect Credits applied or sold or Offsets applied during this permit cycle.

### A. Definitions

**Cap Load (lbs):** The mass load of a pollutant authorized by an NPDES permit. Cap loads for TN and TP are implemented in NPDES permits by the establishment of Annual Net TN and TP Mass Load limits. The term "Net" is used to recognize that Credits and Offsets may be used to comply with the limits. The Annual Net Mass Load must be less than or equal to the Cap Load to achieve compliance.

**Certification:** Written approval by the Department of a proposed pollutant reduction activity to generate credits before the credits are verified and registered to be used to comply with NPDES permit effluent limitations.

**Compliance Year:** The year-long period starting October 1<sup>st</sup> and ending September 30<sup>th</sup>. The Compliance Year will be named for the year in which it ends. For example, the period of October 1, 2011 through September 30, 2012 is compliance year 2012.

**Credit:** The tradable unit of compliance that corresponds with a unit of reduction of a pollutant as recognized by DEP which, when certified, verified and registered, may be used to comply with effluent limits contained in an NPDES permit.

If the Annual Total Mass Load at the end of the Compliance Year is less than the Cap Load in the permit, the number of Credits that may be verified is determined by the following equation:

$(\text{Cap Load} - \text{Offsets incorporated into Cap Load (if applicable)} - \text{Annual Total Mass Load}) \times \text{Delivery Ratio} \times 0.9$ , where 0.9 is the factor used to provide a reserve ratio of 10%.

**Delivery Ratio:** A ratio that compensates for the natural attenuation of a pollutant as it travels in water before it reaches a defined compliance point. The Delivery Ratios for the facility authorized to discharge under this permit are as follows:

- TN: 0.700
- TP: 0.436

**Net Mass Load (lbs):**

- **Monthly Net Mass Load** = Total Monthly Mass Load + (Total Credits sold during the month / Delivery Ratio) – (Total Credits applied during the month / Delivery Ratio) – Offsets applied.
- **Annual Net Mass Load** = The sum of Monthly Net Mass Loads for one year beginning October 1<sup>st</sup> and ending September 30<sup>th</sup>, adjusted for transactions that may occur during the Truing Period.

**Offset:** The pollutant load reduction measured in pounds (lbs) that is created by an action, activity or technology which, when approved by DEP, may be used to comply with effluent limits contained in an NPDES permit. The offset may only be used by the NPDES permittee that DEP determines is associated

with the load reduction achieved by the action, activity or technology. Offsets may be applied to meet compliance with Cap Loads, but may not be treated as Credits, and are not eligible for sale or trading.

**Registration:** An accounting mechanism used by the Department to track certified and verified credits before they may be used to comply with NPDES permit effluent limitations.

**Total Mass Load (lbs):**

- **Monthly Total Mass Load** = The sum of the actual daily discharge loads (lbs/day) divided by the number of samples per month, multiplied by the number of days in the month. The daily discharge load (lbs/day) equals the average daily flow (MGD) on the day of sampling, multiplied by that day's sample concentration (mg/l), multiplied by 8.34.
- **Annual Total Mass Load** = The sum of the Monthly Total Mass Loads for one year beginning October 1<sup>st</sup> and ending September 30<sup>th</sup>.

**Total Nitrogen:** For concentration and load, Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO<sub>2</sub>+NO<sub>3</sub>-N), where TKN and NO<sub>2</sub>+NO<sub>3</sub>-N are measured in the same sample.

**Truing Period:** The time provided at the end of each Compliance Year for a permittee to come into compliance through the application of Credits and Offsets towards the Annual Net Mass Loads. The Truing Period will start on October 1<sup>st</sup> and end on November 28<sup>th</sup> of the same calendar year. During this period, compliance for the specified year may be achieved by using registered Credits that were generated during that Compliance Year. For example, Credits that are used to achieve compliance in Compliance Year 2012 must have been generated during Compliance Year 2012. Approved Offsets that have been generated may also be applied during the Truing Period.

**Verification:** Assurance that the verification plan contained in a certification, permit or other approval issued by the Department under this section has been implemented. Verification is required prior to registration of the credits for use in an NPDES permit to comply with NPDES permit effluent limitations.

B. Use of Credits for Compliance

1. The permittee is authorized to apply TN and TP Credits to achieve compliance with Cap Loads when the Credits are certified, verified and registered in accordance with 25 Pa. Code 96.8.
2. All Credits must be certified, verified, and registered for the year in which they are used for compliance with this permit. Credits may be applied to achieve compliance until the end of the Truing Period for the Compliance Year.
3. Where non-compliance with a Cap Load is the result of an unmet obligation of a contractual agreement for Credits resulting from failure of the pollutant reduction activity, the failure of the pollutant reduction activity was due to uncontrollable or unforeseeable circumstances, and the permittee provides timely notice to DEP, DEP may consider the factors contained in 25 Pa. Code 96.8(h)(5)(i), (ii), and (iii) to determine the appropriate resolution.

C. Use of Offsets for Compliance

1. Offsets must be approved by DEP in writing before they may be applied for compliance with Cap Loads, in accordance with 25 Pa. Code 96.8(h)(3).
2. Offsets that are approved under this permit are listed in Part A, Footnotes. These Offsets may be applied each Compliance Year to achieve compliance with the Cap Loads. The application of these Offsets may be reported on a monthly basis or on an annual basis, at the permittee's discretion. Additional Offsets may be approved throughout the permit term.
3. Offsets may be approved for the transfer of load between facilities owned by the same entity.

D. Modification of Cap Loads

In general, the Cap Loads specified in this permit may be modified only if one or more of the following occur during the permit term:

1. A facility that has an NPDES permit elects to eliminate its discharge and connect to the facility covered under this permit. The lesser of existing annual loads or the facility's Cap Loads will be added to the Cap Loads in this permit.
2. DEP or EPA determines that modified Cap Loads are necessary to achieve water quality standards for the protection of the Chesapeake Bay.

E. Reporting Requirements

1. The facility shall utilize DEP's electronic Discharge Monitoring Report (eDMR) system to submit DMR data and Supplemental DMR forms. This is required to assist DEP with nutrient credit certification and verification, and compliance assessment. Unless the permittee is already using the eDMR system, within 30 days of permit issuance, the permittee shall submit the necessary Registration and Trading Partner Agreement forms to participate in eDMR, and begin using eDMR for submission of DMR data and Supplemental DMR forms when DEP notifies the permittee to begin doing so. The eDMR website is <http://www.dep.state.pa.us/edmr>. Use of eDMR shall continue unless the requirements of Part A III.B.3 are met.
2. The Nutrient Monitoring supplemental form (3800-FM-WSFR0444) shall be used to report daily nutrient sampling results for each monitoring period. This completed form shall be attached to the DMR submission. The spreadsheet version of this form, available on DEP's website, must be used for Credit certification and verification requests submitted to DEP.
3. The Monthly Nitrogen Budget and Monthly Phosphorus Budget supplemental forms (3800-FM-WSFR0445 and 3800-FM-WSFR0446, respectively) shall be used to calculate Monthly Net Mass Loads. The permittee shall report Credits applied or sold during the monitoring period, including registry number, contract effective date, and DEP certification approval date, and approved Offsets applied during the monitoring period, including the source of Offsets and DEP approval date. The completed forms shall be attached to the DMR submission.
4. The DMR for the reporting of Annual Net Mass Loads for TN and TP is due on November 28<sup>th</sup> following each Compliance Year. Also due on November 28<sup>th</sup> is the Annual Nutrient Summary supplemental form (3800-FM-WSFR0447), which must be attached to the DMR. This form shall be used to calculate the Annual Net Mass Load and summarize the Credits applied or sold and approved Offsets applied throughout the entire Compliance Year and Truing Period. If Credits are applied or sold or if approved Offsets are applied during the Truing Period, the Monthly Nitrogen Budget and/or Monthly Phosphorus Budget supplemental forms shall also be attached to the DMR to record details of these transactions.

**III. OTHER REQUIREMENTS**

- A. If, in the opinion of the Department, by reason of change in the character of wastes or increased load upon the treatment facilities, or changed use or condition of the receiving body of water, or otherwise, the said effluent ceases to be satisfactory or the treatment facilities shall have created public nuisance, then upon notice by the Department the right herein granted to discharge such effluent shall cease and become null and void unless within the time specified by the Department, the permittee shall adopt such remedial measures as will produce an effluent which, in the opinion of the Department, will be satisfactory for discharge into the said receiving body of water.
- B. Collected screenings, slurries, sludges, and other solids shall be handled and disposed of in compliance with 25 Pa. Code, and in a manner equivalent to the requirements indicated in Chapters 287, 288, 291, 295, 297 and 299 (relating to permits and requirements for landfilling, land application, incineration, and storage of industrial sludge), Federal Regulation 40 CFR 257, Pennsylvania Clean Streams Law,

Pennsylvania Solid Waste Management Act of 1980, and the Federal Clean Water Act and its amendments.

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

- C. The permittee shall keep and maintain the records of used lamp phosphors waste materials received at the facility in accordance with Condition D of the requirements of Residual Waste General Permit WMGR133, and shall report to the Department the information (including changes in the source and chemical characteristics of the lamp phosphors waste materials) as required under Condition E of Residual Waste General Permit WMGR133. All hauled-in wastes not covered under Residual Waste General Permit WMGR133 shall be documented in accordance with Part A III.C.3 of this permit.

#### IV. WHOLE EFFLUENT TOXICITY (WET)

##### A. General Requirements

1. The permittee shall conduct acute WET tests as specified in this section. The permittee shall collect discharge samples and perform WET tests to generate acute survival data for the cladoceran, *Ceriodaphnia dubia* and acute survival 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: 0.3%, 2%, 30%, 60%, and 100% effluent, with a control, where 0.3% 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](http://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 annually, at a minimum, during the period January 1 – December 31. Annual WET tests must be completed at least 6 months apart, and shall start in the year the permit becomes effective if the permit effective date is prior to October 1.
2. A complete WET test report shall be submitted to the DEP regional office that issued the permit within 45 days of test completion. A complete WET test report submission shall include the information contained in paragraph H, below. The permittee shall continue annual WET monitoring, at a minimum, during the permit renewal review period and during any period of administrative extension of this permit.
3. If a test failure is determined for any endpoint during annual monitoring, the permittee shall initiate a re-test for the species with the failure 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 may resume annual monitoring.
5. If there is a failure for one or more endpoints in a re-test, the permittee shall initiate or continue quarterly WET testing for both species until there are four consecutive passing results for all endpoints. 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 shall attach the 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)

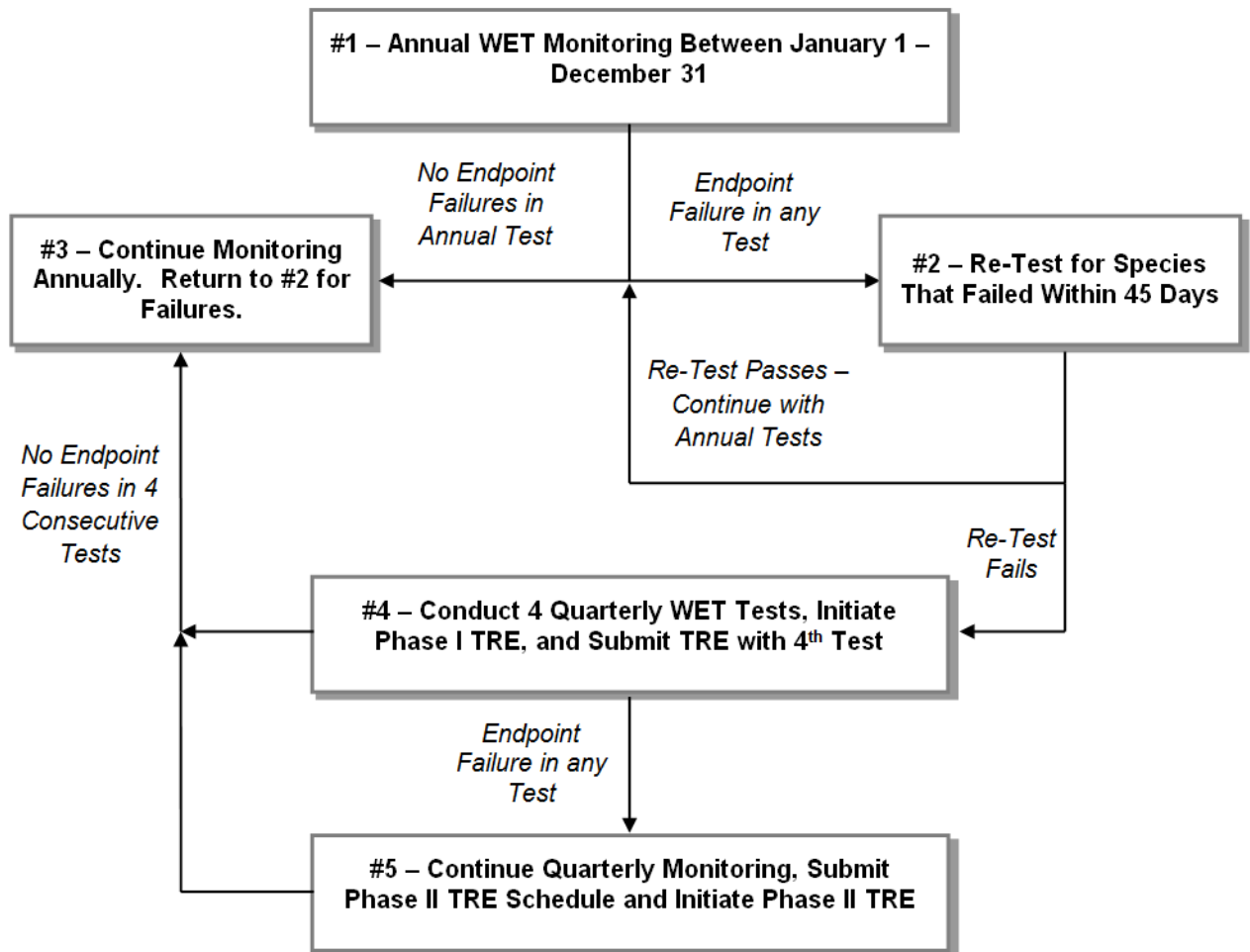
1. The Phase I TRE trigger is one WET endpoint failure followed by a re-test that confirms the failure for the same species. When the TRE process is triggered, quarterly WET testing shall be initiated for both species until there are four consecutive passing results for all endpoints. The Phase I TRE 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 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, performance of a Phase II TRE is not required, and annual WET testing in accordance with paragraph B.1 may resume.
4. If the four WET tests produce at least one failing result during the Phase I TRE process, the permittee shall continue quarterly WETT 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.

3. If four consecutive quarterly WET tests produce passing results for all endpoints during the Phase II TRE process, annual WET testing in accordance with paragraph B.1 may be initiated or resume.

An overview of the process described in paragraphs B, C and D is presented below:



E. Sample Collection

For each acute testing event, a 24-hour flow-proportioned composite sample shall be collected. For each chronic testing event, three 24-hour flow-proportioned, 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. 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 ≤ 6°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 45 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. Applicability of Non-Stormwater Discharges

Except as provided in paragraph A.2 below, all stormwater discharges covered by this permit shall be composed entirely of stormwater.

1. Except as provided in paragraph A.2, discharges of material other than stormwater must be in compliance with the provisions of this or another NPDES permit.
  2. The following non-polluting water discharges may be authorized, provided the discharge is in compliance with paragraph D.4(a) below: 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 conditions condensate, springs, uncontaminated groundwater, and foundation or footing drains where flows are not contaminated with process materials such as solvents.
- B. This permit does not authorize the discharge of any polluting substances resulting from an on-site spill. Such spills shall be controlled through proper implementation of a Preparedness, Prevention, and Contingency (PPC) Plan as stated in Section C below
- C. This permit does not authorize any discharge (stormwater or non-stormwater) containing any pollutant that may cause or contribute to an impact on aquatic life or pose a substantial hazard to human health or the environment due to its quantity or concentration.

### D. Preparedness, Prevention, and Contingency Plans

1. Persons subject to this permit shall have developed a Preparedness, Prevention and Contingency (PPC) Plan in accordance with Title 25. Pa Code § 91.34 and the DEP's *Guidelines for the Development and Implementation of Environmental Emergency Response Plans* in conjunction with *Supplemental Guidance for the Development and Implementation of Preparedness, Prevention and Contingency (PPC) Plans under the National Pollutant Discharge Elimination System (NPDES) Stormwater Permitting Program*. The PPC Plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the facility. In addition, the PPC Plan shall describe the implementation of practices which are to be used to reduce the pollutants in stormwater discharges at the facility ensuring compliance with the terms and conditions of this permit.
2. The PPC Plan shall contain a narrative consideration of the appropriateness of traditional stormwater management practices (practices other than those which control the source of pollutants) and the use of BMPs to control stormwater runoff and prevent stormwater pollution. Based on an assessment of the potential of various sources at the plant to contribute pollutants to stormwater discharges, the PPC Plan shall set forth measures determined to be reasonable and appropriate which shall be implemented and maintained.
3. The PPC Plan shall identify areas which, due to topography, activities or other factors, have a high potential for significant soil erosion, and identify measures to limit erosion. Sediment and Erosion prevention and control measures should be developed and implemented in accordance with Title 25



Pa. Code Chapter 102 and the technical guidance document *Erosion and Sediment Pollution Control Manual* (DEP ID: 363-2134-008).

4. Non-Stormwater Discharges

- a. The PPC Plan shall contain a certification that the discharge has been tested or evaluated for the presence of non-stormwater discharges. The PPC Plan can be certified by an operator of the facility who is knowledgeable of the existing sources of non-stormwater discharges at the facility. The certification shall include the identification of potential significant sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing methods used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the stormwater discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the PPC Plan shall indicate why the certification required by this part was not feasible. A discharger that is unable to provide the certification required by this part must notify DEP within 180 days of the effective date of this Permit.
- b. Except for flows from fire fighting activities, sources of non-stormwater listed in paragraph A.2 of this condition that are combined with stormwater discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge.

5. Qualified personnel shall conduct site compliance evaluations using the *Annual Inspection Form* at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

- a. 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. Measures to reduce pollutant loadings 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. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in the PPC Plan and pollution prevention measures and controls identified in the plan shall be revised as appropriate within 15 days of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 90 days after the inspection.
- c. A report summarizing the scope of the inspection, using the DEP's *Annual Inspection Form* shall be completed each calendar year and retained as part of the PPC Plan for at least one year after coverage under this permit terminates.

6. Consistency with Other Plans

PPC Plans may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under Section 311 of the Clean Water Act or BMPs otherwise required by an NPDES permit for the facility as long as such requirement is incorporated into the plan.

7. Facility Security

Facilities shall have the necessary security systems to prevent accidental or intentional entry which could result in an unintentional discharge of pollutants to surface waters of the Commonwealth. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

8. Training

Facility employees shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws and regulations, and in the PPC Plan and the particular features of the facility and its operation. Where applicable, the plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractors or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

9. Plan Update

The permittee shall periodically review and amend the PPC Plan. This must also occur when:

- a. Applicable DEP or federal regulations are revised, or this permit is revised;
- b. The PPC Plan fails in an emergency;
- c. 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;
- d. The list of emergency coordinators or equipment changes; or
- e. As otherwise required by DEP.

E. Stormwater Sampling Requirements

1. If stormwater sampling is required by the permit, 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.
2. Samples taken in compliance with the monitoring requirements specified above shall be taken from the discharge at Outfalls 002, 003, 004.

**VI. CHEMICAL ADDITIVES**

- A. Chemical additives to control corrosion, scaling, algae, slime, fouling, oxygen, etc., and blowdown discharge rates shall be managed by the permittee to ensure that toxic effects in the receiving stream are prevented. Usage rates shall be limited to the minimum amount necessary to accomplish the intended purposes of chemical addition, and approval is limited to the chemicals and usage rates specified in the attached Chemical Additives Usage Form or submitted pursuant to the following requirements.
- B. Whenever a change in chemical additives or increase in usage rates is desired by the permittee, a written notification in the format specified by the Department, shall be submitted at least sixty (60) days prior to the proposed use of the chemical. For each proposed chemical or usage rate, the written notification, as a minimum, shall include the following:
  1. Trade names of additive.
  2. Name and address of additive manufacturer.
  3. Material Safety Data Sheet (MSDS) or other available information on mammalian or aquatic toxicological effects.

4. Bioassay data including the 96-hour LC50 on the whole product.
  5. Proposed average and maximum additive usage rates in lbs/day.
  6. A flow diagram showing the point of chemical addition and the affected outfalls.
  7. The expected concentration of the product at the final outfall.
  8. The product density for liquids (lb/gal) used to convert usage rate (gpd) to in-system concentrations (mg/l).
  9. The analytical test method that could be used to verify final discharge concentrations when the product is in use and the associated minimum analytical detection level (mg/l).
  10. Conditioned water discharge rate (blowdown rate) and duration (hours).
  11. Available data on the degradation of or decomposition of the additive in the aquatic environment.
  12. Any other data or information the permittee believes would be helpful to the Department in completing its review.
- C. Use of products or chemicals that contain one or more ingredients that are carcinogens is generally prohibited. Before proposing limited use of such products or chemicals, the permittee must first thoroughly investigate use of alternative products or chemicals to avoid the use of the carcinogens. If no suitable alternatives are available, the permittee must submit written documentation as part of the information required above, that demonstrates to the satisfaction of the Department that no suitable alternatives are available and that any carcinogen in the proposed chemical or product will not be detectable in the final effluent using the most sensitive analytical method available.
- D. Based on the information presented, the Department will determine within 60 days whether the existing NPDES permit must be amended to include specific effluent limitations for active ingredients or other control measures. When so required, the permittee will be advised within 60 days that a formal request for a permit amendment is required including a filing fee and Act 14 notices.
- E. If a permit amendment application is not requested, or approval/information request/denial of the proposal is not received within 60 days, the permittee may proceed with the use of the proposed chemical additive or usage rate.
- F. Accurate records of usage (name of additive, quantity added, date added) of any approved chemical additive and blowdown discharge volumes must be maintained on the Chemical Additives Usage Form, kept on site by the permittee, and submitted to the Department with Discharge Monitoring Reports (DMRs). All correspondence and notifications related to the chemical additives and usage rates must also be kept on site with the required daily chemical usage records. If the notification is incomplete or the Department notifies the permittee that the proposed usage rate will cause violations of water quality standards, then use of the requested chemical additive or requested change in its usage rate is not authorized.

## VII. STORMWATER BEST MANAGEMENT PRACTICES (BMPs)

The permittee shall develop and maintain Storm Water Management Plan (SWMP) to determine the Best Management Practices (BMPs) needed for storm water pollution control. The SWMP shall incorporate the PPC Plan and a listing of structural and non-structural controls to prevent the introduction of industrial pollutants into stormwater runoff.

The BMP requirements operate as limitations on stormwater discharges that reflect the application of BAT/BCT treatment technology, as defined at 40 CFR §125.3(d). All storm water discharges shall comply with any applicable effluent limitations established in 25 PA Code §86-§90, §91-§97, §102 and §105. Stormwater discharges shall not result in a violation of the water quality criteria described in 25 PA Code §16 and §93.

Facilities subject to SARA Title III, Section 313 reporting requirements for releases of Section 313 water priority chemicals to water that have occurred within the last three years shall include a description of such releases in the PPC Plan.

As an option to treating uncontaminated rainwater, the permittee may test the accumulated water in the Bulk Chemical Storage Area (Tank Farm) containment areas for ammonia-nitrogen and pH. If the ammonia-nitrogen level is below 2 mg/L and the pH is within the range of 6.0 to 9.0 Std. Units, the water may be considered uncontaminated stormwater and discharged to stormwater Outfall 002. All other accumulated

water in the containment area should be considered contaminated, and treated at the WWTP prior to discharge.