COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

NPDES PERMIT NO: PA0012637
Amendment No. 1

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.*,

Phillips 66 Company
4101 Post Road
Trainer, PA 19061-5052

is authorized to discharge from a facility known as **Trainer Refinery**, located at **4101 Post Road**, **Trainer Borough, Delaware County**, to **Marcus Hook Creek, Delaware River Estuary Zone 4 and Stony Creek** in Watershed(s) **3-G** 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 June 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 May 25, 2012

ISSUED BY /Sd/
Jenifer L. Fields, P.E.
Clean Water Program Manager
Southeast Regional Office

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

I. A. For Outfall 002 **, Latitude** 39° 49’ 30.61” **, Longitude** 75° 24’ 1.61” **, River Mile Index** 0.208 **, Stream Code** 00517

Discharging to Stony Creek

which receives wastewater from Stony Creek Guard Basin which consists of non-contact cooling water, storm water and steam trap condensate.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report					Continuous	Recorded
pH (S.U.)			6.0			9.0	1/week	Grab
Total Residual Chlorine*				0.16		0.50	1/week	Grab
Temperature (ºF)						110	Continuous	Recorded
Heat Rejection Rate** (MBTUs/day)		43,200					1/day	Calculation
Total Suspended Solids Effluent Net	9,050	18,100		30	60	75	1/week	24-Hr Composite
Total Dissolved Solids Effluent Net				Report	Report	Report	1/week	24-Hr Composite
Oil and Grease	4,525			15		30	1/week	3 Grabs/24 Hours
Total Aluminum				Report	Report	Report	1/month	24-Hr Composite

Outfall 002, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Organic Carbon Effluent Net						5.0	1/week	Grab

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

at Outfall 002. *Sample must be collected during the use of sodium hypochlorite in river intake water and fire water system. **See Part C Other requirement No. I.C.

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

I. B. For Outfall 003 **, Latitude** 39° 49’ 18.26” **, Longitude** 75° 24’ 32.94” **, River Mile Index** 0.568 **, Stream Code** 00511

Discharging to Marcus Hook Creek

which receives stormwater from parking lot and roadway near two empty natural gas tanks.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)					Report		1/year	Grab
CBOD5					Report		1/year	Grab
Chemical Oxygen Demand					Report		1/year	Grab
Total Suspended Solids					Report		1/year	Grab
Oil and Grease					Report		1/year	Grab
Total Kjeldahl Nitrogen					Report		1/year	Grab
Total Phosphorus					Report		1/year	Grab
Dissolved Iron					Report		1/year	Grab

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

at Outfall 003

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

I. C. For Outfall 005 **, Latitude** 39° 49’ 3.72” **, Longitude** 75° 24’ 25.61” **, River Mile Index** 0.208 **, Stream Code** 00511

Discharging to Marcus Hook Creek

which receives stormwater from Dock Drive roadway leading to West Tank Field and steam trap condensate.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)					Report		1/year	Grab
CBOD5					Report		1/year	Grab
Chemical Oxygen Demand					Report		1/year	Grab
Total Suspended Solids					Report		1/year	Grab
Oil and Grease					Report		1/year	Grab
Total Kjeldahl Nitrogen					Report		1/year	Grab
Total Phosphorus					Report		1/year	Grab
Dissolved Iron					Report		1/year	Grab
Total Zinc					Report		1/year	Grab

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

at Outfall 005

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

I. D. For Outfall 006 **, Latitude** 39° 49’ 21.40” **, Longitude** 75° 23’ 55.80” **, River Mile Index** 0.009 **, Stream Code** 00517

Discharging to Stony Creek

which receives stormwater from PECO Boulevard and railroad right of way

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)					Report		1/year	Grab
CBOD5					Report		1/year	Grab
Chemical Oxygen Demand					Report		1/year	Grab
Total Suspended Solids					Report		1/year	Grab
Oil and Grease					Report		1/year	Grab
Total Kjeldahl Nitrogen					Report		1/year	Grab
Total Phosphorus					Report		1/year	Grab
Dissolved Iron					Report		1/year	Grab
PCBs (Wet Weather) (pg/L)*					Report		1/6 months	24-Hr Composite

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

at Outfall 006. *See Part C Other Requirement No.I.K.

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

I. E. For Outfall 007 **, Latitude** 39° 49’ 23.92” **, Longitude** 75° 23’ 56.85” **, River Mile Index** 0.0018 **, Stream Code** 00517

Discharging to Stony Creek

which receives stormwater from South Drive roadway, fire training area and railroad right of way and steam trap condensate.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)					Report		1/year	Grab
CBOD5					Report		1/year	Grab
Chemical Oxygen Demand					Report		1/year	Grab
Total Suspended Solids					Report		1/year	Grab
Oil and Grease					Report		1/year	Grab
Total Kjeldahl Nitrogen					Report		1/year	Grab
Total Phosphorus					Report		1/year	Grab
Total Copper					Report		1/year	Grab
Dissolved Iron					Report		1/year	Grab

Outfall 007, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Lead					Report		1/year	Grab
Total Zinc					Report		1/year	Grab
PCBs (Wet Weather) (pg/L)*					Report		1/6 months	24-Hr Composite

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

at Outfall 007. *See Part C Other Requirement No.I.K.

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

I. F. For Outfall 008 **, Latitude** 39° 49’ 27.94” **, Longitude** 75° 23’ 59.98” **, River Mile Index** 0.17 **, Stream Code** 00517

Discharging to Stony Creek

which receives stormwater from Crude Drive roadway and steam trap condensate.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)					Report		1/year	Grab
CBOD5					Report		1/year	Grab
Chemical Oxygen Demand					Report		1/year	Grab
Total Suspended Solids					Report		1/year	Grab
Oil and Grease					Report		1/year	Grab
Total Kjeldahl Nitrogen					Report		1/year	Grab
Total Phosphorus					Report		1/year	Grab
Dissolved Iron					Report		1/year	Grab
Total Zinc					Report		1/year	Grab

Outfall 008, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
PCBs (Wet Weather) (pg/L)*					Report		1/6 months	24-Hr Composite

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

at Outfall 008. *See Part C Other Requirement No.I.K.

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

I. G. For Outfall 011 **, Latitude** 39° 49’ 8.16” **, Longitude** 75° 23’ 56.21” **, River Mile Index** 80.55 **, Stream Code** 00002

Discharging to Delaware River

which receives stormwater from non-process areas and roadways.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)					Report		1/year	Grab
CBOD5					Report		1/year	Grab
Chemical Oxygen Demand					Report		1/year	Grab
Total Suspended Solids					Report		1/year	Grab
Oil and Grease					Report		1/year	Grab
Total Kjeldahl Nitrogen					Report		1/year	Grab
Total Phosphorus					Report		1/year	Grab
Dissolved Iron					Report		1/year	Grab
Total Zinc					Report		1/year	Grab

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

at Outfall 011

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

I. H. For Outfall 012 **, Latitude** 39° 49’ 17.52” **, Longitude** 75° 23’ 49.47” **, River Mile Index** 80.55 **, Stream Code** 00002

Discharging to Delaware River

which receives stormwater from non-process areas and roadways.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)					Report		1/year	Grab
CBOD5					Report		1/year	Grab
Chemical Oxygen Demand					Report		1/year	Grab
Total Suspended Solids					Report		1/year	Grab
Oil and Grease					Report		1/year	Grab
Total Kjeldahl Nitrogen					Report		1/year	Grab
Total Phosphorus					Report		1/year	Grab
Dissolved Iron					Report		1/year	Grab

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

at Outfall 012

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

I. I. For Outfall 013 **, Latitude** 39° 48’ 59.57” **, Longitude** 75° 24’ 17.39” **, River Mile Index** 0.3 **, Stream Code** 00511

Discharging to Marcus Hook Creek

which receives stormwater from non-process areas and roadways.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)					Report		1/year	Grab
CBOD5					Report		1/year	Grab
Chemical Oxygen Demand					Report		1/year	Grab
Total Suspended Solids					Report		1/year	Grab
Oil and Grease					Report		1/year	Grab
Total Kjeldahl Nitrogen					Report		1/year	Grab
Total Phosphorus					Report		1/year	Grab
Dissolved Iron					Report		1/year	Grab

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

at Outfall 013

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

I. J. For Monitoring Point 101 , **Latitude** 39° 49' 16.61" , **Longitude** 75° 24' 27.97" , **River Mile Index** 0.417 , **Stream Code** 0051

Discharging to Marcus Hook Creek

which receives wastewater from Marcus Hook Guard Basin which consists of non-contact cooling water, stormwater, steam condensate and backwash from water softening system.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report					Continuous	Recorded
pH (S.U.)			6.0			9.0	1/week	Grab
Total Residual Chlorine*				0.16		0.50	1/week	Grab
Temperature (ºF)						110	Continuous	Recorded
Heat Rejection Rate** (MBTUs/day)		67,470					1/day	Calculation
Total Suspended Solids Effluent Net	16,460	32,920		30	60	75	1/week	24-Hr Composite
Oil and Grease	8,230			15		30	1/week	3 Grabs/24 Hours
Total Aluminum				Report	Report	Report	1/month	24-Hr Composite
Total Iron				Report	Report	Report	1/month	24-Hr Composite

Monitoring Point 101, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Lead				Report	Report	Report	1/month	24-Hr Composite
Total Organic Carbon Effluent Net						5.0	1/week	Grab

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

at Outfall 101. *Sample must be collected during the use of sodium hypochlorite in the river water intake and fire water system. **See Part C Other Requirement No.I.C.

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

I. K. For Monitoring Point 201 **, Latitude** 39° 49' 16.57" **, Longitude** 75° 24' 27.94" **, River Mile Index** 0.398 **, Stream Code** 00511

Discharging to Marcus Hook Creek

which receives wastewater from the industrial wastewater treatment plant which consists of process wastewater, miscellaneous waste water, treated groundwater 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	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report					Continuous	Recorded
pH (S.U.)			6.0			9.0	1/day	Grab
Total Residual Chlorine*				0.16		0.50	1/week	Grab
BOD5	1,000	2,000		34	68	85	2/week	24-Hr Composite
CBOD20	1,500						2/month	24-Hr Composite
CBOD20 Minimum % Removal (%)**	89.25						2/month	Calculation
Chemical Oxygen Demand	17,608	33,130		603	1,135	1,508	2/week	24-Hr Composite
Total Suspended Solids	875	1,750		30	60	75	2/week	24-Hr Composite
Total Dissolved Solids Effluent Net	29,190	58,380		1,000	2,000	2,500	2/week	24-Hr Composite

Monitoring Point 201, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Oil and Grease	438	876		15	30	30	2/week	Grab
Ammonia-Nitrogen	1,020	2,040		35	70	87	2/week	24-Hr Composite
Total Aluminum				Report	Report	Report	1/month	24-Hr Composite
Hexavalent Chromium	1.1	2.4		0.04	0.08	0.1	2/week	24-Hr Composite
Total Chromium	13	37		0.45	1.27	1.27	2/week	24-Hr Composite
Total Copper				Report	Report	Report	1/month	24-Hr Composite
Free Available Cyanide				Report	Report	Report	1/month	24-Hr Composite
Total Cyanide				Report	Report	Report	1/month	24-Hr Composite
Total Lead				Report	Report	Report	1/month	24-Hr Composite
Total Magnesium				Report	Report	Report	1/month	24-Hr Composite
Total Selenium				Report	Report	Report	1/month	24-Hr Composite

Monitoring Point 201 , Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Sulfide	13	30		0.45	1.03	1.13	2/week	24-Hr Composite
Total Zinc				Report	Report	Report	1/month	24-Hr Composite
Total Phenolics	11	34		0.38	1.16	1.16	2/week	24-Hr Composite
PCBs (Dry Weather) (pg/L)***					Report		1/6 months	24-Hr Composite

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

at Outfall 201. *Sample must be collected during the use of sodium hypochlorite in the river water intake and fire water system. **See Part C Other Requirement No.I.B. ***See Part C Other Requirement No.I.K.

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

Additional Requirements

The permittee may not discharge:

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

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

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

4. Foam or substances that produce an observed change in the color, taste, odor or turbidity of the receiving water, unless those conditions are otherwise controlled through effluent limitations or other requirements in this permit. (25 Pa Code 92a.41(c))

Footnotes

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

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

Supplemental Information

(1) The effluent limitations for Monitoring Point 101 were determined using an effluent discharge rate of 65.77 million gallons per day.

The effluent limitations for Monitoring Point 201 were determined using an effluent discharge rate of 3.5 million gallons per day.

The effluent limitations for Outfall 002 were determined using an effluent discharge rate of 36.17 million gallons per day.

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 (40 CFR 122.4(j)(1))

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

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. Unless instructed otherwise in Part C of this permit, properly completed DMR(s) must be received by the agency(ies) below within 28 days after the end of each reporting period. 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
   2 East Main Street
   Norristown, PA 19401

   Delaware River Basin Commission
   P. O. Box 7360
   West Trenton, NJ 08628

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

3. 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.

4. 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))

5. 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 of any 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. (25 Pa. Code 92a.24(a))

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-WSFR0482), 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-WSFR0450) 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-WSFR0437) as an attachment to the DMR. If no municipal wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report:

(1) The dates that municipal wastes were received.

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

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

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

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

4. Unanticipated Noncompliance or Potential Pollution Reporting

a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code 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-WSFR0440). The reports shall contain the information listed in paragraph C.4.b.(ii) of this section. (40 CFR 122.41(l)(7))

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

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

a. One hundred micrograms per liter.

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

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

d. One milligram per liter for antimony.

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

f. Any other notification level established by DEP.

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

a. Five hundred micrograms per liter.

b. One milligram per liter for antimony.

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

d. Any other notification level established by DEP.

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance Schedules (25 Pa. Code 92a.51 and 40 CFR 122.47(a))

1. The permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit.

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

B. Permit Modification, Termination, or Revocation and Reissuance

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

2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. (40 CFR 122.41(f))

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

C. Duty to Provide Information

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

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

3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information. (40 CFR 122.41(l)(8))

D. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e))

E. Duty to Mitigate

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

F. Bypassing

1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions in paragraphs two, three and four of this section. (40 CFR 122.41(m)(2))

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

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

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. (40 CFR 122.41(m)(4)(i)(B))

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

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

4. Notice

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

   b. Unanticipated Bypass

      (i) The permittee shall submit immediate notice of an unanticipated bypass causing or threatening pollution. The notice shall be in accordance with Part A III.C.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 §122.4l(a)(2).

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

B. Falsifying Information

Any person who does any of the following:

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

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

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

C. Liability

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

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

D. Need to Halt or Reduce Activity Not a Defense

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

III. OTHER RESPONSIBILITIES

A. Right of Entry

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

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

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

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

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

B. Transfer of Permits

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

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

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

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

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

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

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

C. Property Rights

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

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit. (40 CFR 122.41(b))

E. Other Laws

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

IV. ANNUAL FEES

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

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

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

Invoices for annual fees will be mailed to permittees approximately three months prior to the due date. In the event that an invoice is not received, the permittee is nonetheless responsible for payment. Throughout a five year permit term, permittees will pay four annual fees followed by a permit renewal application fee in the last year of permit coverage. Permittees may contact 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 Water Standards and Facility Regulation
Re: Chapter 92a Annual Fee
P.O. Box 8466
Harrisburg, PA 17105-8466

PART C

I. OTHER REQUIREMENTS

A. If, at anytime, the DEP determines that the discharge permitted herein creates a public nuisance or causes environmental harm to the receiving water of the Commonwealth, the DEP may require the permittee to adopt such remedial measures as will produce a satisfactory effluent. If the permittee fails to adopt such remedial measures within the time specified by the DEP, the right to discharge herein granted shall, upon notice by the DEP, cease and become null and void.

B. The CBOD20 in the raw wastewater which is considered to be the API separator effluent, shall be reduced by at least 89.25 percent as a monthly average in accordance with the requirements of the Delaware River Basin Commission for Zone 4 of the Delaware Estuary.

C. For Monitoring Point 101 and Outfall 002, in order to demonstrate compliance with thermal discharge limitations, the permittee shall monitor the following parameters:

Parameter	Units	Monitoring Location
Waste discharge, Q_d	MGD	101 and 002
Waste discharge temperature, T_d	°F	101 and 002
Plant intake water temperature, T_1	°F	Intake Port on Delaware River

To demonstrate compliance, the permittee shall perform the following calculation:

$$Q_d \text{ X } 8.34 \ (T_d - T_1) = \text{actual heat discharge rate, in MBTUs/day}$$

Heat rejection rates in Part A are subject to revision based on additional site specific data if available in the future.

D. Analysis for the following pollutant(s) shall be performed using the following test method(s) contained in 40 C.F.R. Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants, or any approved test method(s) of equal or greater sensitivity:

Parameter	Test Method
Chromium-Hexavalent	3120 (ICP)
Chromium, Total	3111 B (AA, flame)
Cyanide, Free	DEP Method, Automated
Cyanide, Total	335.4 (Color., Auto)
Copper, Total	3111 B (AA, flame)
Lead, Total	200.8 (ICP/MS)
Phenolic Compounds	420.4 (4AAP, Auto)
Zinc, Total	289.2 (AA, furnace)
Aluminum, Total	3113 B (AA, furnace)

E. If there is a change in ownership of this facility or in the name of the permittee, an application for transfer of the permit must be submitted to the DEP.

F. The permittee will ensure that applied chlorine dosages, used for disinfection or other purposes, are optimized to the degree necessary such that the total residual chlorine (TRC) in the discharge effluent does not cause an adverse stream impact. In doing so, the permittee shall consider relevant factors affecting required chlorine dosage, such as wastewater characteristics, mixing and contact times, desired result of chlorination, and expected impact on the receiving water body. The TRC data shall be recorded weekly and maintained at the facility.

If the DEP determines or receives documented evidence that levels of TRC in the permittee's effluent are causing adverse water quality impacts in the receiving water, the permittee shall be required to institute necessary additional steps to reduce or eliminate such impact.

G. Collected screenings, slurries, sludges, and other solids shall be handled and disposed of in compliance with 25 Pa. Code, Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to general provisions and requirements for landfilling, impoundments, land application, composting, processing, and storage of residual waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste, requirements for generators and transporters, and hazardous waste permit programs) and applicable Federal Regulations, the Federal Clean Water Act, RCRA, and their amendments.

H. The DEP may identify and require certain discharge specific data to be submitted before the expiration date of this permit. Upon notification by the DEP, the permittee will have 12 months from the date of the notice to provide the required data. These data, along with any other data available to the DEP, will be used in completing the Watershed TMDL/WLA Analysis and in establishing discharge effluent limits.

I. Laboratory Certification

The Environmental Laboratory Accreditation Act of 2002 requires that all environmental laboratories register with the DEP. An environmental laboratory is any facility engaged in the testing or analysis of environmental samples required by a statute administered by the DEP relating to the protection of the environment or of public health, safety, and welfare.

J. This permit may be modified, revoked, and reissued to incorporate revised effluent limitations or other water quality standards in accordance with any determination of a Section 316(a) Clean Water Act relative to thermal discharge from this permitted facility.

K. On December 15, 2003, the U.S. EPA, Regions 2 and 3 adopted a Total Maximum Daily Load (TMDL) for PCBs for Zones 2, 3, 4, and 5 of the tidal Delaware River. The TMDL requires that the facilities identified as discharging PCBs to the Delaware River prepare and implement a PCB Waste Minimization and Reduction Program also known as Pollution Minimization Plan (PMP). This facility has been identified as a Group 1 discharger. One sample shall be collected per six months during a wet weather flow from Outfalls 006, 007 and 008. One sample shall be collected per six months during a dry weather flow from Monitoring Point 201. All samples shall be analyzed utilizing EPA Method 1668 A. Sample collection techniques, identification analytical approaches, and reporting requirements can be found at http://www.state.nj.us/drbc/PCB_info.htm. The permittee shall continue implementation, monitoring, and reporting of the approved PMP. For information on how to implement a PMP, go to the Delaware River Basin Commission's (DRBC) website at http://www.state.nj.us/drbc/PMP_info.htm. The monitoring information, reports, and a copy of the PMP shall be submitted to DEP and DRBC at the following addresses:

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

Delaware River Basin Commission
Modeling/Monitoring Branch
P.O. Box 7360
West Trenton, NJ 08628

L. The permittee shall sample intake river water withdrawn from the Delaware River Estuary. The samples shall be collected once a week and be analyzed for total suspended solids using a 24-hour composite; total dissolved solids using a 24-hour composite; total organic carbon using a grab sample; and daily sampling for temperature using an immersion – stabilization method to record temperature of intake water.

The worksheets to calculate net concentration for TSS, TDS, and TOC are attached with the permit. The heat rejection rate must be calculated as specified in Other Requirement No.I.C of the permit.

M. Stormwater Credits

The effluent limitations contained on pages 16, 17 and 18 for Outfall 201 are based on dry weather flow condition. During wet weather condition the credits for stormwater runoff through indudstrial wastewater treatment plant/Outfall 201 shall be calculated based on the following procedure:

a. The quantity of pollutants discharged through stormwater for the purpose of stormwater credit shall be determined by using the values listed in the following table:

Parameter	30 Day Average lb/1000 Gallons of Stormwater	Daily Maximum lb/1000 Gallons of Stormwater
BOD5	0.22	0.40
Total Suspended Solids	0.18	0.28
Chemical Oxygen Demand	1.5	3.0
Oil and Grease	0.067	0.13
Total Phenolics	0.0014	0.0029
Chromium, Total	0.0018	0.0050
Chromium, Hexavalent	0.00023	0.00052

b. On any day the stormwater mass loading for the pollutant listed in the above table shall be calculated by multiplying 30-day average value for that pollutant from the above table times the stormwater flow for that day.

c. If the total credit exceeds the gross mass the net mass for that day shall be considered zero.

d. The average monthly mass for reporting on the DMRs is the arithmetic average of all of the daily net mass values including zeros.

e. When sampling and analytical determination is done more frequently than required, all daily determinations must be given equal weight in the calculation of average monthly mass loading.

f. The calculated net mass loading for a day can be converted into concentration (mg/l) based on the flow on that day. The average monthly concentration is the arithmetic average of these daily net concentrations.

g. If any day's net mass/concentrations exceed the daily maximum permit limits, the permittee may recalculate that day's mass/concentration using daily maximum values from the above tables. The recalculated values must be referred to as net daily maximum values on the DMRs. These shall not be used for calculating average monthly.

h. All calculations used in determining the net values as reported on the DMRs shall be submitted monthly as an attachment to the DMRs.

i. An example calculation work sheet is enclosed with the permit.

N. The permittee shall conduct nutrient monitoring in accordance with the DRBC letter dated September 7, 2011 at Monitoring Point 201 for the pollutants listed in the letter.

O. This NPDES permit is subject to all permit conditions as set forth in the Water Quality Management permits 2371207, 2372201, 2376203 and 2386201.

II. CHEMICAL ADDITIVES

The additive(s) and usage rate(s) currently approved are the following:

	Usage Rate (lbs/day)	
Name	**Average Monthly**	**Maximum Daily**
Guardlon 9400	1	2
BPB 59396	3	29
Multiplex® 822	353	969
Y9BH1233	104	982
BPC 67275	5	12
BPW 76453	378	1134
BPW 76910	54	162
CL2OUT 1100	355	1065
BPC67275	9	89
BPC68570	73	218
BPC 68915	23	208
Y7BH972	924	8088
Y9BH1246	96	264
Sodium Hypochlorite	Total Residual Chlorine	effluent limit in Part A will govern the usage rate

A. Chemical additives to control corrosion, scaling, algae, slime, fouling or oxygen, etc., and blowdown discharge rates shall be managed by the permittee to ensure that toxic effects in the receiving stream are prevented. These also include substances/compounds added to the wastewater such as polymers, water softeners, flocculents, coagulants, emulsion breakers, dispersants, and oxygen scavengers.

B. Usage rates shall be consistent with the quantities and rates approved by the DEP and shall be limited to the minimum amount necessary to accomplish the intended purposes of chemical addition.

C. Accurate usage records (name of additive, quantity added, date added) of any approved chemical additive and blowdown discharge volumes must be maintained on the Chemical Additive Reporting form and kept on site by the permittee. To the maximum extent possible, sampling and laboratory analytical procedures for these chemicals are to conform with the “Sampling and Analytical Testing Instructions for Industrial Discharges” routinely used for completion of NPDES permit applications.

D. Whenever a change in chemical additive or increase in usage rates is desired by the permittee, a written notification shall be submitted to the DEP at least sixty (60) days prior to the proposed use of the chemical. All required data must be provided on the form for each new or changed chemical additive or proposed change in the usage rate.

E. As a minimum, the following information must be provided on the whole product (if data on the whole product is not available, monitoring data for all active ingredients in the product shall be provided):

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 DEP in completing its review.

F. Based on the information presented, the DEP will decide whether specific effluent limitations for one or more active ingredients or other control requirements are necessary. Where necessary, the DEP may establish permit limits, require other controls or deny use of these chemicals. If the information is complete, use of the proposed chemical additive or usage rate will be considered approved 60 days after the date of notification to the DEP. If the notification is incomplete or the DEP notifies the permittee that the proposed usage rate will cause violations of water quality standards, the permittee will be advised that a permit amendment is required and would likely be denied. All such letters and notifications must be kept on site with the required daily chemical usage data.

G. 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 thoroughly investigate the use of alternative products or chemicals to avoid the use of the carcinogens. If no alternatives are available, the permittee must submit written documentation as part of the information required above, that demonstrates to the satisfaction of the DEP 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. Based on the information presented, the DEP will decide whether specific effluent limitations or other control requirements are necessary for the chemicals, and where necessary, establish permit limits require other controls or deny use of these chemicals.

III. HYDROSTATIC TEST WATER DISCHARGE REQUIREMENTS

The discharge of hydrostatic test water from aboveground storage tanks is approved on an as-needed basis and is subject to the following conditions:

A. The permittee shall notify the Department 24 hours before the discharge occurs. This notification shall include the tank number, material previously stored, quantity of water, and the receiving stream.

B. No streams shall be dewatered to the extent that downstream uses, including aquatic life are impacted during filling operations.

C. Non-tidal receiving stream flow shall not be increased by more than 25 percent of the stream flow. No erosion of banks or streambeds shall be induced by the discharge; appropriate erosion and sedimentation controls will be installed at the discharge point. The rate of discharge must be controlled to prevent scouring of streambed and erosion of the streambank.

D. The discharge shall not contain any substances in concentration or amount sufficient to be harmful to water uses protected or to human, animal, plant, or aquatic life. The discharger is responsible for any impairment of water use that occurs as a result of this discharge. The DEP reserves the right to require that the discharge be discontinued.

E. All water discharged must be properly directed so that it causes no nuisance conditions and does not pool or pond prior to reaching a surface water.

F. The monitoring report shall be submitted to the Department. The monitoring report must also include the name of the receiving stream, the discharge location point, the starting and ending date and time for the test/discharge, the tank number, and the location, date and time of sample collection, and all test data presented in a summary table by sampling location and time.

G. A laboratory /sampling QA/QC plan shall be submitted with the monitoring reports.

H. The discharge of hydrostatic test water must comply with the following effluent limitations and monitoring requirements:

Parameter	Instantaneous Maximum (mg/l)	Sampling Frequency	Sample Type
Flow (gpm)	Monitor/Report	2/Discharge	Measured
Duration (hours)	Monitor/Report	Continuous	N/A
Dissolved Oxygen	Minimum of 5.0	2/Discharge	Grab
Suspended Solids(Net)	60	2/Discharge	Grab
Oil and Grease	30	2/Discharge	Grab
Iron, Total (Net)	1.5	2/Discharge	Grab
Iron, Dissolved (Net)	0.3	2/Discharge	Grab
Copper, Total (Net)	0.1	2/Discharge	Grab
Temperature	110ºF	2/Discharge	Grab
pH Standard Units	Between 6 and 9 at all times	2/Discharge	Grab

The river intake water shall be sampled as it is pumped to the tank for suspended solids; iron, total; iron, dissolved; and copper, total; to compute net discharge limits.

IV. WHOLE EFFLUENT TOXICITY

The permittee must perform quarterly Whole Effluent Toxicity (WET) tests at the location where effluent from Monitoring Points101 and 201 combine together to generate acute and chronic toxicity data on the cladoceran, Ceriodaphnia dubia and the fathead minnow, Pimephales promelas for the first two years of a permit cycle. The results shall be reported as No Observed Effect Concentration (NOEC) and Chronic Toxic Units (TUc) with a Percent Minimum Significant Difference (PMSD) reported. The results shall also be reported as Inhibitory Concentration, 25 percent (IC25). After completing four acceptable toxicity tests, the permittee may request that testing be limited to the most sensitive species. After two years, the testing frequency may be reduced or eliminated based on the results.

The PMSD represents the smallest difference between the control mean and a treatment mean that leads to the statistical rejection of the null hypothesis (i.e., no toxicity) at each concentration of the toxicity test dilution series. The PMSD provides an indication of within test variability, and smaller values of PMSD are associated with increased power to detect a toxic effect.

In lieu of conducting separate acute and chronic toxicity tests, the permittee may utilize the survival data from chronic toxicity tests to calculate 48-hour and 96-hour LC_{50}. The 48-hour and 96-hour LC_{50} data and Acute Toxic Units (TU_a) shall also be reported with the chronic toxicity results.

The testing should follow USEPA guidance on Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. The dilution series to be used is 100%, 50%, 25%, 12.5%, 6.25%. and 3.125% for both acute and chronic tests. The target instream concentration for chronic (TIWCc) is 4% and for acute (TIWCa) is 100%. To pass a chronic test the NOEC must be above 4% and for acute it must be 100%.

A copy of the analysis report and a summary of the test results (on the enclosed form) shall be submitted to the following agencies after each reporting period:

Dr. Thomas Fikslin
Delaware River Basin Commission
P.O. Box 7360
West Trenton, NJ 08628-0360

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

V. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

A. Prohibition of Nonstormwater Discharges

1. Except as provided in A.2, all discharges to stormwater Outfalls 003, 005, 006, 007, 008, 011, 012 and 013 shall be composed entirely of stormwater and allowable nonstormwater as specified in A.2 below.

2. The following nonstormwater discharges may be authorized, provided the discharge is in compliance with D.2.b: discharges from fire fighting activities; fire hydrant flushings, potable water sources, including waterline flushings, irrigation drainage, lawn watering, routine external building washdown which does not use detergents or other compounds, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used, air conditioning condensate, springs, uncontaminated groundwater, and foundation or footing drains where flows are not contaminated with process materials such as solvents.

B. Spills

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 D below.

C. This permit does not authorize any discharge (stormwater or nonstormwater) 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. Development of Plan

Operators of facilities shall have developed a PPC Plan in accordance with 25 Pa. Code Section 91.34 and the “Guidelines for the Development and Implementation of Environmental Emergency Response Plans.” 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 BMPs that are to be used to reduce the pollutants in stormwater discharges at the facility ensuring compliance with the terms and conditions of this permit. The PPC Plan shall be completed within 90 days from the permit effective date.

2. Nonstormwater Discharges

a. The PPC Plan shall contain a certification that the discharge has been tested or evaluated for the presence of nonstormwater discharges. The certification shall include the identification of potential significant sources of nonstormwater at the site, a description of the results of any test and/or evaluation for the presence of nonstormwater 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 does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the

PPC Plan shall indicate why the certification was not feasible. A discharger that is unable to provide the certification must notify the DEP within 90 days of the effective date of this permit.

b. Except for flows from fire fighting activities, sources of nonstormwater listed in A.2. (authorized nonstormwater discharges) that are combined with stormwater discharges must be identified in the Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the nonstormwater component(s) of the discharge.

3. Special Requirements for SARA Title III, Section 313 Facilities

a. Facilities subject to SARA Title III, Section 313 shall include in the PPC Plan a description of releases to land or water of Section 313 water priority chemicals that have occurred within the last three years. Each of the following shall be evaluated for the reasonable potential for contributing pollutants to runoff: loading and unloading operations, outdoor storage activities, outdoor manufacturing or processing activities, significant dust or particulate generating process, and on-site waste disposal practices. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with stormwater; and history of significant leaks or spills of toxic or hazardous pollutants.

b. Engineering Certification. No stormwater PPC Plan for facilities subject to SARA Title III, Section 313 requirements for chemicals that are classified as “Section 313 water priority chemicals” shall be effective unless it has been reviewed by a Registered Professional Engineer and certified to by such Professional Engineer. A Registered Professional Engineer shall recertify the PPC Plan every year thereafter. This certification may be combined with the required annual evaluation in D.4. By means of these certifications, the engineer, having examined the facility and being familiar with the provisions of this part, shall attest that the storm water PPC Plan has been prepared in accordance with good engineering practices. Such certification shall in no way relieve the owner or operator of a facility covered by the PPC Plan of the duty to prepare and fully implement such Plan.

4. Comprehensive Site Compliance Evaluations and Recordkeeping

Qualified personnel shall conduct site compliance evaluations at least once a year. Such evaluations shall include:

a. Visual inspection and evaluation of areas contributing to a stormwater discharge 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 the 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 and made available upon request and retained as part of the PPC Plan for at least one year after coverage under this permit terminates.

E. Stormwater Sampling and Reporting

1. If stormwater samples are required by this permit, they shall be collected as grab samples during the first 30 minutes, but no later than one-hour of the discharge resulting from a storm event that occurs at least 72 hours from the previously measurable storm event.

2. When the discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit, in lieu of sampling data, a description of why samples could not be collected, including available documentation of the event. This sampling waiver may not be used more than once during a two-year period.

3. Stormwater monitoring results shall be summarized on a DMR form and the DEP's "Additional Information for the Reporting of Stormwater Monitoring" form.

4. When a facility has two or more outfalls that may reasonably be believed to discharge substantially identical effluents, based on a consideration of features and activities within the area drained by the outfall, the permittee may sample one such outfall and report that the quantitative data also applies to the substantially identical outfalls.

F. Stormwater Best Management Practices (BMPs)

The permittee shall implement at least the following BMPs:

- Manage sludge in accordance with all applicable permit requirements; temporarily collect and store sludge in enclosed containers or tanks.

- Store chemicals in secure and covered areas on impervious surfaces away from storm drains.

- For new facilities and improvements: Design wastewater treatment facilities to avoid, to the maximum extent practicable, storm water commingling with sanitary wastewater.

- Efficiently use herbicides for weed control; where practicable, investigate use of the least toxic herbicides; do not apply during windy conditions.

- Do not wash parts or equipment over impervious surfaces that wash into storm drains.

- Conduct Good Housekeeping Practices.

- Implement infiltration techniques, including infiltration basins, trenches, dry wells, porous pavements, etc., wherever practicable.

VI. COOLING WATER INTAKE STRUCTURE(S)

Section 316(b) of the Clean Water Act (CWA) requires establishing the best technology available (BTA) for minimizing adverse environmental impacts associated with the use of cooling water intake structures. As the operator of a facility with an existing cooling water intake structure, the following conditions apply:

A. The location, design, construction and capacity of the facility's cooling water intake structure(s) must conform to requirements pursuant to Section 316(b) of the CWA and any state regulations effective at the time an appropriate BTA is approved by the Department.

B. The facility must submit the following information within 2 years of permit issuance:

1. Source water physical data. This includes:

a. A narrative description and scaled drawings showing the physical configuration of all source waterbodies used by your facility, including areal dimensions, depths, salinity and temperature regimes, and any other documentation that supports your determination of the water body type where each cooling water intake structure is located;

b. Identification and characterization of the source waterbody's hydrological and geomorphologic features, including the low flow and mean annual flow, as well as the methods used to conduct any physical studies to determine the intake's area of influence within the waterbody and the results of such studies;

c. Locational maps.

2. Cooling water intake structure data. This includes:

a. A narrative description of the configuration of each cooling water intake structure(s) and its location in the waterbody and water column;

b. Latitude and longitude in degrees, minutes, and seconds for each cooling water intake structure(s);

c. A detailed description of any racks, bars or screens, including dimensions and mesh size, if applicable;

d. A narrative description of the operation of each cooling water intake structure(s), including design intake flows, actual average intake flows, daily hours of operation, number of days of the year in operation and seasonal changes, if applicable;

e. Measured and/or calculated approach and through-screen velocities including a copy of the calculations used to determine velocities, if applicable;

f. A flow distribution and water balance diagram that includes all sources of water to the facility, re-circulating flows, and discharges;

g. Engineering drawings of the cooling water intake structure.

3. Source water biological characterization data. The following may be determined from existing documentation, reports or biological studies:

a. A list of species (or relevant taxa) for all life stages and their relative abundance in the vicinity of the cooling water intake structure;

b. Identification of the species and life stages that would be most susceptible to impingement and entrainment. Species evaluated should include the forage base as well as those most important in terms of significance to commercial and recreational fisheries;

c. Identification and evaluation of the primary period of reproduction, larval recruitment, and period of peak abundance for relevant taxa;

d. Identification of all federal and/or state threatened, endangered and other protected species that might be susceptible to impingement and entrainment at your cooling water intake structures;

e. Identification of all aquatic invasive species recorded or observed in the vicinity of the cooling water intake structure.

4. A description of any technology or operational measures that are proposed or currently in place that minimize impingement and entrainment.

5. A plan to minimize impingement mortality which includes an evaluation of technologies and operational measures expected to minimize adverse environmental impact due to impingement at the cooling water intake structures.

6. A plan to minimize entrainment mortality which includes an evaluation of technologies and operational measures expected to minimize adverse environmental impact due to entrainment at the cooling water intake structures.

C. If the Department requests any additional information to review any submission required by this permit regarding Section 316(b), the permittee shall submit the additional information within 30 days of receipt of the Department's request.

D. The permittee must maintain and retain data and other records for any information developed pursuant to Section 316(b) for a minimum of ten years.

E. The information submission requirements for Section 316(b) of the CWA are for the purpose of establishing BTA for minimizing adverse environmental impacts associated with the use of cooling water intake structures. This permit may be modified to incorporate additional requirements as information becomes available to the Department.