



July 14, 2015

Mr. Leonard Gipson
Philadelphia Water Department
1101 Market Street, 5th Floor
Philadelphia, PA 19107-2994

Re: Draft NPDES Permit - Sewage
Philadelphia Water Department NEWPCP
Application No. PA0026689
Authorization ID No. 916556
City of Philadelphia
Philadelphia County

Dear Mr. Gipson:

The Department of Environmental Protection (DEP) has prepared the enclosed *second* draft NPDES permit for your review and comment.

Also enclosed is a copy of a public notice that, in accordance with DEP regulations at 25 Pa. Code § 92a.82(b), you are required to post near the entrance to your premises and, if the facility or discharge location is remote from these premises, at the entrance to the facility or at the discharge location. These postings shall remain for 30 days.

DEP will publish notice of the draft permit in the Pennsylvania Bulletin in the near future. You may provide written comments on the draft permit up to 30 days following publication of this notice. Following the 30-day public comment period (which may be extended by 15 days at DEP's discretion), DEP will consider any comments received and make a decision on whether to issue a final permit.

If you have any questions, please contact Begay Omuralieva at 484.250.5189.

Sincerely,


Pravin C. Patel, P.E.
Environmental Engineer Manager
Clean Water Program

Enclosures

cc: U. S. Environmental Protection Agency
DRBC
Operations Section
File

NPDES PUBLIC NOTICE

Application for National Pollutant Discharge Elimination System (NPDES) Permit to Discharge to State Waters

Southeast Regional Office: Regional Clean Water Program Manager, 2 E Main Street, Norristown, PA 19401, Telephone: 484.250.5970.

PA0026689, Sewage, SIC Code 4952, Philadelphia Water Department, 1101 Market Street 5th Floor, Philadelphia, PA 19107-2994.
Facility Name: Philadelphia Water Department Ne WPCP. This existing facility is located in Philadelphia City, Philadelphia County.

Description of Existing Activity: The application is for a renewal of an NPDES permit for an existing discharge of treated Sewage.

The receiving stream(s), Delaware River, Frankford Creek, Pennypack Creek, Tacony Creek, Unnamed Tributary to Delaware River, Unnamed Tributary to Pennypack Creek and Unnamed Tributary to Tacony Creek, is located in State Water Plan watershed 3-J and is classified for Warm Water Fishes, Migratory Fishes, Warm Water Fishes, Trout Stocking and Migratory Fishes, aquatic life, water supply and recreation. The discharge is not expected to affect public water supplies.

The proposed effluent limits for Outfall 001 are based on a design flow of 210 MGD.

Parameters	Mass (lb/day)		Concentration (mg/l)			
	Average Monthly	Weekly Average	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0
Dissolved Oxygen	XXX	XXX	Report	Report	XXX	XXX
Total Residual Chlorine	XXX	XXX	XXX	0.5	XXX	1.0
Color (Pt-Co Units)	XXX	XXX	XXX	Report Daily Max	XXX	XXX
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX
CBOD5	36,430	54,645	XXX	25	40 Wkly Avg	50
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX
CBOD20	71,760	XXX	XXX	XXX	XXX	XXX
CBOD5 Minimum Percent Removal	XXX	XXX	86	XXX	XXX	XXX
Total Suspended Solids	52,540	78,810	XXX	30	45 Wkly Avg	60
Total Suspended Solids Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX
TSS Minimum Percent Removal	XXX	XXX	85	XXX	XXX	XXX
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	XXX
Specific Conductance * (µmhos/cm)	XXX	XXX	XXX	Report	Report	XXX
Fecal Coliform (CFU/100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1,000**
Ammonia-Nitrogen	XXX	XXX	XXX	35	Report	70
Nitrate as N	XXX	XXX	XXX	Report	Report	XXX
Nitrite as N	XXX	XXX	XXX	Report	Report	XXX
Total Kjeldahl Nitrogen	XXX	XXX	XXX	Report	Report	XXX
Total Phosphorus	XXX	XXX	XXX	Report	Report	XXX
Total Copper	XXX	XXX	XXX	Report	XXX	XXX
Dissolved Iron	XXX	XXX	XXX	Report	XXX	XXX
Total Iron	XXX	XXX	XXX	Report	XXX	XXX
Total Mercury	XXX	XXX	XXX	Report	XXX	XXX
Total Zinc	XXX	XXX	XXX	Report	XXX	XXX
4,4-DDD	XXX	XXX	XXX	Report	XXX	XXX
4,4-DDT	XXX	XXX	XXX	Report	XXX	XXX
4,4-DDE	XXX	XXX	XXX	Report	XXX	XXX
Benzidine	XXX	XXX	XXX	Report	XXX	XXX

Chlordane	XXX	XXX	XXX	Report	XXX	XXX
1,2-Dichloroethane	XXX	XXX	XXX	Report	XXX	XXX
gamma-BHC	XXX	XXX	XXX	Report	XXX	XXX
Heptachlor	XXX	XXX	XXX	Report	XXX	XXX
Tetrachloroethylene	XXX	XXX	XXX	Report	XXX	XXX
Trichloroethylene	XXX	XXX	XXX	Report	XXX	XXX
PCBs (Dry Weather) (pg/L)	XXX	XXX	XXX	XXX	Report Max	XXX
PCBs (Wet Weather) (pg/L)	XXX	XXX	XXX	XXX	Report Max	XXX
Chronic Toxicity - Ceriodaphnia Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX
Chronic Toxicity - Ceriodaphnia Reproduction (TUc)	XXX	XXX	XXX	XXX	Report	XXX
Acute Toxicity - Ceriodaphnia Survival (TUa)	XXX	XXX	XXX	XXX	Report	XXX
Chronic Toxicity - Pimephales Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX
Acute Toxicity - Pimephales Survival (TUa)	XXX	XXX	XXX	XXX	Report	XXX
Chronic Toxicity - Pimephales Growth (TUc)	XXX	XXX	XXX	XXX	Report	XXX

* Specific conductance shall be measured from the same sample taken for TDS.

** Shall not exceed in more than 10% samples tested.

The proposed effluent limits for Outfall 061 are based on stormwater.

Parameters	Mass (lb/day)		Concentration (mg/l)			
	Average Monthly		Minimum	Average Monthly	Daily Maximum	Instant. Maximum
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX
CBOD5	XXX	XXX	XXX	XXX	Report	XXX
Chemical Oxygen Demand	XXX	XXX	XXX	XXX	Report	XXX
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX
Fecal Coliform (CFU/100 ml)	XXX	XXX	XXX	XXX	Report	XXX
Total Kjeldahl Nitrogen	XXX	XXX	XXX	XXX	Report	XXX
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX

The proposed effluent limitations for Combined Sewer Overflow Outfalls 002-008, 010-052 and 058-060 as follows:

All discharges of floating materials, oil, grease, scum, foam, sheen, and substances which produce color, tastes, odors, turbidity or settle to form deposits shall be controlled to level which will not be initial or harmful to the water uses to be protected or to human, plant or aquatic life.

In addition, the permit contains the following major special conditions:

- I.
 - A. Stormwater Discharge
 - B. Necessary Property Rights
 - C. Sludge Disposal
 - D. 86 % CBOD5 reduction
 - E. CBOD5 reduction
 - F. Toxic Approved Test Methods
 - G. TRC
 - H. TMDL / WLA Analysis
 - I. O&M Plan
 - J. Act 11 Notification
 - K. Sampler equipment
 - L. Effluent and influent sampling
 - M. Methods for exceeding 315 MGD flow
- II. Stormwater Requirements
- III. POTW Pretreatment Program Implementation
- IV. Combined Sewer Overflows
- V. PCB Minimization Plan and Monitoring
- VI. Whole Effluent Toxicity Testing

You may make an appointment to review the DEP files on this case by calling the File Review Coordinator at 484-250-5910.

The EPA Waiver is not in effect.



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE REQUIREMENTS FOR PUBLICLY OWNED
TREATMENT WORKS (POTWs)**

NPDES PERMIT NO: PA0026689

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.*,

**Philadelphia Water Department
1101 Market Street, 5th Floor
Philadelphia, PA 19107-2994**

is authorized to discharge from a facility known as **Northeast Wastewater Pollution Control Plant - Site ID No. 451953**, located at **3899 Richmond Street, Philadelphia, Philadelphia County** to the **Delaware River Estuary Zone - 3 (Outfall 001, CSO Outfalls 002-008, 010-022, and 058), Pennypack Creek (CSO Outfalls 023-027), Tacony Creek (CSO Outfalls 028-041 and 059) and Frankford Creek (CSO Outfalls 042-052, 054-057, 060, and Stormwater Outfall 061)** in Watershed 3J 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 _____

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON _____

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))

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

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

DATE PERMIT ISSUED _____

ISSUED BY _____

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

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

I.A. For Outfall 001, Latitude 39° 58' 51.00", Longitude 75° 4' 42.00", River Mile Index 104.2, Stream Code 00002

Receiving Waters: Delaware River

Type of Effluent: Treated municipal wastewater from Northeast Wastewater Pollution Control Plant 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 and Footnotes).

Parameter	Effluent Limitations				Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)		Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average Report Daily Max	Minimum	Average Monthly		
Flow (MGD)	Report	Report	XXX	XXX	XXX	Metered
pH (S.U.)	XXX	XXX	6.0 Inst. Min	XXX	XXX	Grab
Dissolved Oxygen	XXX	XXX	Report	Report	XXX	Grab
Total Residual Chlorine BOD5	XXX	XXX	XXX	0.5	XXX	Grab
Raw Sewage Influent	Report	XXX	XXX	Report	XXX	24-Hr Composite
CBOD5	36,430	54,645	XXX	25 Wkly. Avg	50	24-Hr Composite
CBOD5	Report	XXX	XXX	Report	XXX	24-Hr Composite
Raw Sewage Influent	XXX	XXX	86	XXX	XXX	Calculation
Minimum % Removal	71,760	XXX	XXX	XXX	XXX	24-Hr Composite
CBOD20	XXX	XXX	XXX	Report	Report	24-Hr Composite
Color	XXX	XXX	XXX	Report	Report	1/week Composite

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

Parameter	Effluent Limitations					Monitoring Requirements		
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum Measurement Frequency ⁽²⁾	Instant. Maximum ⁽³⁾	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Daily Maximum			
Total Dissolved Solids *	XXX	XXX	XXX	Report	Report	1/week	XXX	24-Hr Composite
Specific Conductance * (umhos/cm)	XXX	XXX	XXX	Report	Report	1/week	XXX	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	XXX	XXX	Report	XXX	1/day	XXX	24-Hr Composite
Total Suspended Solids	52,540	78,810	XXX	30	45 Wkly. Avg	1/day	60	24-Hr Composite
Total Suspended Solids Minimum % Removal	XXX	XXX	85 Min	XXX	XXX	1/day	XXX	Calculation
Fecal Coliform (#/100 ml)	XXX	XXX	XXX	200 Geo. Mean	XXX	1/day	1,000**	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	35	XXX	1/week	70	24-Hr Composite
Nitrate as N	XXX	XXX	XXX	Report	Report	1/week	XXX	24-Hr Composite
Nitrite as N	XXX	XXX	XXX	Report	Report	1/week	XXX	24-Hr Composite
Total Kjeldahl Nitrogen	XXX	XXX	XXX	Report	Report	1/week	XXX	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	Report	1/week	XXX	24-Hr Composite
Total Copper	XXX	XXX	XXX	Report	XXX	1/month	XXX	24-Hr Composite
Dissolved Iron	XXX	XXX	XXX	Report	XXX	1/month	XXX	24-Hr Composite

* Specific conductance shall be measured from the same sample taken for TDS.

** Shall not exceed in more than 10% samples tested.

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

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	
Total Zinc	XXX	XXX	XXX	Report	XXX	XXX	24-Hr Composite
Mercury, Total	XXX	XXX	XXX	Report	XXX	XXX	24-Hr Composite
Total Iron	XXX	XXX	XXX	Report	XXX	XXX	24-Hr Composite
4,4-DDD	XXX	XXX	XXX	Report	XXX	XXX	24-Hr Composite
4,4-DDT	XXX	XXX	XXX	Report	XXX	XXX	24-Hr Composite
4,4-DDE	XXX	XXX	XXX	Report	XXX	XXX	24-Hr Composite
Chlordane	XXX	XXX	XXX	Report	XXX	XXX	24-Hr Composite
gamma-BHC	XXX	XXX	XXX	Report	XXX	XXX	24-Hr Composite
Heptachlor	XXX	XXX	XXX	Report	XXX	XXX	24-Hr Composite
Benzidine	XXX	XXX	XXX	Report	XXX	XXX	24-Hr Composite
Trichloroethylene	XXX	XXX	XXX	Report	XXX	XXX	Grab
Tetrachloroethylene	XXX	XXX	XXX	Report	XXX	XXX	Grab
1,2 - Dichloroethane	XXX	XXX	XXX	Report	XXX	XXX	Grab
PCBs (Dry Weather) (pg/L)	XXX	XXX	XXX	XXX	Report Max	XXX	24-Hr Composite
PCBs (Wet Weather) (pg/L)	XXX	XXX	XXX	XXX	Report Max	XXX	24-Hr Composite

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

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Daily Maximum		
Chronic Toxicity - Ceriodaphnia Survival (TUc)	XXX	XXX	XXX	XXX	Report	1/quarter	24-Hr Composite
Acute Toxicity - Ceriodaphnia Survival (TUa)	XXX	XXX	XXX	XXX	Report	1/quarter	24-Hr Composite
Chronic Toxicity - Pimephales Survival (TUc)	XXX	XXX	XXX	XXX	Report	1/quarter	24-Hr Composite
Chronic Toxicity - Pimephales Growth (TUc)	XXX	XXX	XXX	XXX	Report	1/quarter	24-Hr Composite
Acute Toxicity - Pimephales Survival (TUa)	XXX	XXX	XXX	XXX	Report	1/quarter	24-Hr Composite
Chronic Toxicity - Ceriodaphnia Reproduction (TUc)	XXX	XXX	XXX	XXX	Report	1/quarter	24-Hr Composite

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

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

I. B. For Outfall 061, **Latitude** 39° 59' 54.00", **Longitude** 75° 4' 36.00", **River Mile Index** 0.5, **Stream Code** 02389

Receiving Waters: Frankford Creek

Type of Effluent: Stormwater from Northeast Wastewater Pollution Control Plant Area

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations				Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)		Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly		Minimum	Average Monthly	Daily Maximum	Instant. Maximum
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX
CBOD5	XXX	XXX	XXX	XXX	Report	XXX
Chemical Oxygen Demand	XXX	XXX	XXX	XXX	Report	XXX
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX
Fecal Coliform (#/100 ml)	XXX	XXX	XXX	XXX	Report	XXX
Total Kjeldahl Nitrogen	XXX	XXX	XXX	XXX	Report	XXX
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 061

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**I. C IDENTIFICATION OF COMBINED SEWER OVERFLOW DISCHARGES**

The outfalls identified below serve as combined sewer overflows necessitated by storm water entering the sewer system and exceeding the hydraulic capacity of the sewers and/or the treatment plant and are permitted to discharge only for this reason provided they are in compliance with Part C, Section IV.C. Dry weather discharges from these outfalls are prohibited. Each discharge shall be monitored for cause, frequency, duration, and quantity of flow. Data describing dry and wet weather discharges shall be reported quarterly as required in Part C, Section IV.E.2., and annually as required in Part C, Section IV.E.3.

Outfall No.	Location Description	Name of Receiving Stream	Location	
			Latitude	Longitude
002	Castor Avenue & Balfour Street (D-17)	Delaware River	39°58'50"	75°04'58"
003	Venango Street NW of Casper Street (D-18)	Delaware River	39°58'45"	75°05'06"
004	Tioga Street NW of Casper Street (D-19)	Delaware River	39°58'41"	75°05'15"
005	Ontario Street NW of Casper Street (D-20)	Delaware River	39°58'43"	75°05'28"
006	Westmoreland Street NW of Balfour Street (D-21)	Delaware River	39°58'44"	75°05'41"
007	Allegheny Avenue SE of Bath Street (D-22)	Delaware River	39°58'42"	75°05'53"
008	Indiana Avenue SE of Allen Street (D-23)	Delaware River	39°58'38"	75°06'12"
010	Somerset Street E of Richmond Street (D-25)	Delaware River	39°58'38"	75°06'28"
010	Cambria Street E of Melvale Street (D-24)	Delaware River	39°58'38"	75°06'28"
011	Cottman Street SE of Milnor Street (D-2)	Delaware River	40°01'18"	75°01'44"
012	Princeton Avenue SE of Milnor Street (D-3)	Delaware River	40°01'14"	75°02'00"
013	Disston Street SE of Wissinoming Street (D-4)	Delaware River	40°01'08"	75°02'13"
014	Magee Street SE of Milnor Street (D-5)	Delaware River	40°00'58"	75°02'34"
015	Levick Street SE of Milnor Street (D-6)	Delaware River	40°00'53"	75°02'46"
016	Lardner Street SE of Milnor Street (D-7)	Delaware River	40°00'44"	75°03'05"
017	Comly Street SE of Milnor Street (D-8)	Delaware River	40°00'38"	75°03'13"
018	Dark Run Lane SE of Milnor Street (D-9)	Delaware River	40°00'34"	75°03'18"
019	Sanger Street SE of Milnor Street (D-11)	Delaware River	40°00'21"	75°03'28"
020	Bridge Street SE of Garden Street (D-12)	Delaware River	40°00'02"	75°03'43"
021	Kirkbride Street & Delaware Avenue (D-13)	Delaware River	39°59'53"	75°03'47"
022	Orthodox Street & Delaware Avenue (D-15)	Delaware River	39°59'24"	75°04'04"
023	Frankford Avenue & Ashburner Street (P-1)	Pennypack Creek	40°02'36"	75°01'15"
024	Frankford Avenue & Holmesburg Avenue (P-2)	Pennypack Creek	40°02'36"	75°01'16"
025	Torresdale Avenue NW of Pennypack Creek (P-3)	Pennypack Creek	40°02'13"	75°01'19"
026	Cottage Street & Holmesburg Avenue (P-4)	Pennypack Creek	40°02'23"	75°01'21"
027	Holmesburg Avenue SE of Hegerman Street (P-5)	Pennypack Creek	40°02'02"	75°01'21"

Continued on page 8

Outfall No.	Location Description	Name of Receiving Stream	Location	
			Latitude	Longitude
028	Williams Avenue SE of Sedgewick (T-1)	Taony Creek	40°04'34"	75°09'44"
029	Champlost Avenue W of Taony Creek (T-3)	Taony Creek	40°02'28"	75°06'56"
030	Rising Sun Avenue E of Taony Creek (T-4)	Taony Creek	40°02'11"	75°06'48"
031	Rising Sun Avenue W of Taony Creek (T-5)	Taony Creek	40°02'09"	75°06'48"
032	Bingham Street E of Taony Creek (T-6)	Taony Creek	40°02'03"	75°06'41"
033	Tabor Road W of Taony Creek (T-7)	Taony Creek	40°01'51"	75°06'43"
034	Ashdale Street W of Taony Creek (T-8)	Taony Creek	40°01'42"	75°06'47"
035	Roosevelt Boulevard W of Taony Creek (T-9)	Taony Creek	40°01'37"	75°06'48"
036	Roosevelt Boulevard E of Taony Creek (T-10)	Taony Creek	40°01'37"	75°06'47"
037	Ruscomb Street E of Taony Creek (T-11)	Taony Creek	40°01'29"	75°06'43"
038	Whitaker Avenue E of Taony Creek (T-12)	Taony Creek	40°01'23"	75°06'41"
039	Whitaker Avenue W of Taony Creek (T-13)	Taony Creek	40°01'22"	75°06'42"
040	I Street & Ramona Avenue (T-14)	Taony Creek	40°00'59"	75°06'28"
041	J Street & Juniata Park (T-15)	Taony Creek	40°00'57"	75°06'20"
042	Castor Avenue at Unity Street Circle (F-3)	Frankford Creek	40°00'57"	75°05'51"
043	Wingohocking Street E of Adams Avenue (F-4)	Frankford Creek	40°00'52"	75°05'42"
044	Bristol Street W of Adams Avenue (F-5)	Frankford Creek	40°00'41"	75°05'41"
045	Worrell Street E of Frankford Creek (F-6)	Frankford Creek	40°00'25"	75°05'33"
046	Worrell Street W of Frankford Creek (F-7)	Frankford Creek	40°00'26"	75°05'34"
047	Torresdale Avenue & Hunting Park Avenue (F-8)	Frankford Creek	40°00'21"	75°05'36"
048	Frankford Avenue N of Frankford Creek (F-9)	Frankford Creek	40°00'19"	75°05'34"
049	Frankford Avenue S of Frankford Creek (F-10)	Frankford Creek	40°00'19"	75°05'35"
050	Orchard Street S of Vandike Street (F-11)	Frankford Creek	40°00'15"	75°05'26"
051	Sepviva Street N of Butler Street (F-12)	Frankford Creek	39°59'56"	75°05'14"
052	Bristol Street NW of Belgrade Street (F-14)	Frankford Creek	39°59'49"	75°05'03"
052	Duncan Street under Delaware Expressway (F-13)	Frankford Creek	39°59'49"	75°05'03"
054	Wakeling Street NW of Creek Basin (F-21)	Frankford Creek	40°00'16"	75°04'15"
055	Bridge Street NW of Creek Basin (F-23)	Frankford Creek	40°00'19"	75°04'05"
056	Bridge Street SE of Creek Basin (F-24)	Frankford Creek	40°00'18"	75°04'05"
057	Ash Street W of Creek Basin (F-25)	Frankford Creek	40°00'15"	75°04'15"
058	Levick Street & Everett Avenue (R-13)	Delaware River	40°00'30"	75°03'20"
058	Levick Street & Frontenac Street (R-13A)	Delaware River	40°00'30"	75°03'20"
058	Oakland Street & Benner Street (R-14)	Delaware River	40°00'30"	75°03'20"
059	Rock Run Relief Inflatable Storage Dam (H-35)	Taony Creek	40°02'17"	75°06'53"
060	Castor Avenue & East Hunting Park Avenue (R-18)	Frankford Creek	40°00'36"	75°05'44"

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

Additional Requirements

1. The permittee may not discharge:
 - a. Floating solids, scum, sheen or substances that result in observed deposits in the receiving water. (25 Pa Code 92a.41(c))
 - b. 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))
 - c. 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))
 - d. 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))
2. If the permit requires the reporting of average weekly statistical results, the maximum weekly average concentration and maximum weekly average mass loading shall be reported, regardless of whether the results are obtained for the same or different weeks.
3. The permittee shall monitor the sewage effluent discharge(s) for the effluent parameters identified in the Part A limitations table(s) during all bypass events at the facility, using the sample types that are specified in the limitations table(s). Where the required sample type is "composite", the permittee must commence sample collection within one hour of the start of the bypass, wherever possible. The results shall be reported on the Daily Effluent Monitoring supplemental form (3800-FM-BPNPSM0435) and be incorporated into the calculations used to report self-monitoring data on Discharge Monitoring Reports (DMRs).

Footnotes

- (1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.
- (2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.
- (3) "The Instantaneous Maximum Discharge Limitations are for compliance use by DEP only. Do not report instantaneous maximums on DMRs or supplemental DMRs unless specifically required on those forms to do so."

Supplemental Information

- (1) The hydraulic design capacity of 210.0 million gallons per day for the treatment facility is used to prepare the annual Municipal Wasteload Management Report to help determine whether a "hydraulic overload" situation exists, as defined in Title 25 Pa. Code Chapter 94.
- (2) The effluent limitations for Outfall 001 were determined using an effluent discharge rate of 210.0 MGD.
- (3) The organic design capacity of 350,000 lbs. BOD₅ per day for the treatment facility is used to prepare the annual Municipal Wasteload Management Report to determine whether an "organic overload" condition exists, as defined in 25 Pa. Code Chapter 94.

II. DEFINITIONS

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

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

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

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

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

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

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, 40 CFR 122.2)

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

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

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

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

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

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.

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

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

Indirect Discharger means a non-domestic discharger introducing pollutants to a Publicly Owned Treatment Works (POTW) or other treatment works. (25 Pa. Code § 92a.2, 40 CFR 122.2)

Industrial User means a source of Indirect Discharge. (40 CFR 403.3)

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)

Municipality means a city, town, borough, county, township, school district, institution, authority or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes. (25 Pa. Code § 92a.2)

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

Publicly Owned Treatment Works (POTW) means a treatment works as defined by §212 of the Clean Water Act, owned by a state or municipality. The term includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. The term also includes sewers, pipes or other conveyances if they convey wastewater to a POTW providing treatment. The term also means the municipality as defined in section 502(4) of the Clean Water Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works. (25 Pa Code § 92a.2, 40 CFR 122.2)

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

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii))

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

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

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)

Weekly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

III. SELF-MONITORING, REPORTING AND RECORDKEEPING

A. Representative Sampling

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

2. Records Retention (40 CFR 122.41(i)(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(i)(3))

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

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

4. Test Procedures

- a. Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§ 4101-4113) and 25 Pa. Code Chapter 252, relating to environmental laboratory accreditation.
- b. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be those approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, unless the method is specified in this permit or has been otherwise approved in writing by DEP. (40 CFR 122.41(i)(4), 122.44(i)(1)(iv))
- c. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be sufficiently sensitive. A method is sufficiently sensitive when 1) the method minimum level is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or 2) the method has the lowest minimum level of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, for the measured pollutant or pollutant parameter; or 3) the method is specified in this permit or has been otherwise approved in writing by DEP for the measured pollutant or pollutant parameter. Permittees have the option of providing matrix or sample-specific minimum levels rather than the published levels. (40 CFR 122.44(i)(1)(iv))

5. Quality/Assurance/Control

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

- a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA. (40 CFR 122.41(e), 122.41(i)(3))
- b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136. (40 CFR 122.41(i)(4))

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit. (40 CFR 122.41(e), 122.44(i)(1))
2. Discharge Monitoring Reports (DMRs) must be completed in accordance with DEP's published DMR Instructions (3800-FM-BPNPSM0463). DMRs are based on calendar reporting periods unless Part C of this permit requires otherwise. DMR(s) must be received by the agency(ies) specified in paragraph 3 below in accordance with the following schedule:
 - Monthly DMRs must be received within 28 days following the end of each calendar month.
 - Quarterly DMRs must be received within 28 days following the end of each calendar quarter, i.e., January 28, April 28, July 28, and October 28.
 - Semiannual DMRs must be received within 28 days following the end of each calendar semiannual period, i.e., January 28 and July 28.
 - Annual DMRs must be received by January 28, unless Part C of this permit requires otherwise.
3. The permittee shall complete all Supplemental Reporting forms (Supplemental DMRs) provided by DEP in this permit (or an approved equivalent), and submit the signed, completed forms as an attachment to the DMR(s). If the permittee elects to use DEP's electronic DMR (eDMR) system, one electronic submission may be made for DMRs and Supplemental DMRs. If paper forms are used, the completed forms shall be mailed to:

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

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

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

4. If the permittee elects to begin using DEP's eDMR system to submit DMRs required by the permit, the permittee shall, to assure continuity of business operations, continue using the eDMR system to submit all DMRs and Supplemental Reports required by the permit, unless the following steps are completed to discontinue use of eDMR:
 - a. The permittee shall submit written notification to the regional office that issued the permit that it intends to discontinue use of eDMR. The notification shall be signed by a principal executive officer or authorized agent of the permittee.

- b. The permittee shall continue using eDMR until the permittee receives written notification from DEP's Central Office that the facility has been removed from the eDMR system, and electronic report submissions are no longer expected.
5. The completed DMR Form shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92a.22:
 - For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
 - For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
 - For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

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

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

C. Reporting and Notification Requirements

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

Notice is required when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b). (40 CFR 122.41(l)(1)(i))
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this permit. (40 CFR 122.41(l)(1)(ii))
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii))
 - d. The planned change may result in noncompliance with permit requirements. (40 CFR 122.41(l)(2))
2. **Planned Changes to Waste Stream** – Under the authority of 25 Pa. Code § 92a.24(a) and 40 CFR 122.42(b), the permittee shall provide notice to DEP and EPA as soon as possible but no later than 45 days prior to any planned changes in the volume or pollutant concentration of its influent waste stream as a result of indirect discharges or hauled-in wastes, as specified in paragraphs 2.a. and 2.b., below. Notice shall be provided on the "Planned Changes to Waste Stream" Supplemental Report (3800-FM-BPNPSM0482), available on DEP's website. The permittee shall provide information on the quality and quantity of waste introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW (40 CFR 122.42(b)(3)). 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), 40 CFR 122.42(b)(1))

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

- (i) Any pollutants that were not detected in the facilities' influent waste stream as reported in the permit application; and have not been approved to be included in the permittee's influent waste stream by DEP in writing.
- (ii) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants (40 CFR 122.42(b)(1)).

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), 40 CFR 122.42(b)(2))

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 have been previously approved to be included in the permittee's influent waste stream by DEP in writing.
- (ii) Have an effluent limitation or monitoring requirement in this permit.

The permittee shall provide notification of the introduction of increased influent loading (lbs/day) of approved pollutants in accordance with paragraph 2 above when (1) the cumulative increase in influent loading (lbs/day) exceeds 20% of the maximum loading reported in the permit application, or a loading previously approved by DEP and/or EPA, 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 POTW, 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, may not result in a hydraulic or organic overload condition as defined in 25 Pa. Code § 94.1, and may not cause exceedances of the applicable water quality standards in the receiving stream.

3. Reporting Requirements for Hauled-In Wastes

a. Receipt of Residual Waste

- (i) The permittee shall document the receipt of all hauled-in residual wastes (including but not limited to wastewater from oil and gas wells, food processing waste, and landfill leachate), as defined at 25 Pa. Code § 287.1, that are received for processing at the treatment facility. The permittee shall report hauled-in residual wastes on a monthly basis to DEP on the "Hauled In Residual Wastes" Supplemental Report (3800-FM-BPNPSM0450) as an attachment to the DMR. If no residual wastes were received during a month, submission of the Supplemental Report is not required.

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

- (1) The dates that residual wastes were received.
- (2) The volume (gallons) of wastes received.

- (3) The license plate number of the vehicle transporting the waste to the treatment facility.
- (4) The permit number(s) of the well(s) where residual wastes were generated, if applicable.
- (5) The name and address of the generator of the residual wastes.
- (6) The type of wastewater.

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

- (ii) The following conditions apply to the characterization of residual wastes received by the permittee:
 - (1) If the generator is required to complete a chemical analysis of residual wastes in accordance with 25 Pa. Code § 287.51, the permittee must receive and maintain on file a chemical analysis of the residual wastes it receives. The chemical analysis must conform to the Bureau of Waste Management's Form 26R except as noted in paragraph (2), below. Each load of residual waste received must be covered by a chemical analysis if the generator is required to complete it.
 - (2) For wastewater generated from hydraulic fracturing operations ("frac wastewater") within the first 30 production days of a well site, the chemical analysis may be a general frac wastewater characterization approved by DEP. Thereafter, the chemical analysis must be waste-specific and be reported on the Form 26R.

b. Receipt of Municipal Waste

- (i) The permittee shall document the receipt of all hauled-in municipal wastes (including but not limited to septage and liquid sewage sludge), as defined at 25 Pa. Code § 271.1, that are received for processing at the treatment facility. The permittee shall report hauled-in municipal wastes on a monthly basis to DEP on the "Hauled In Municipal Wastes" Supplemental Report (3800-FM-BPNPSM0437) as an attachment to the DMR. If no municipal wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report:

- (1) The dates that municipal wastes were received.
 - (2) The volume (gallons) of wastes received.
 - (3) The BOD₅ concentration (mg/l) and load (lbs) for the wastes received.
 - (4) The location(s) where wastes were disposed of within the treatment facility.
- (ii) Sampling and analysis of hauled-in municipal wastes must be completed to characterize the organic strength of the wastes, unless composite sampling of influent wastewater is performed at a location downstream of the point of entry for the wastes. The influent BOD₅ characterization for the treatment facility, as reported in the annual Municipal Wasteload Management Report per 25 Pa. Code Chapter 94, must be representative of the hauled-in municipal wastes received.

4. Unanticipated Noncompliance or Potential Pollution Reporting

- a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code §§ 91.33 and 92a.41(b).
- (i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.
 - (ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.
 - (iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.
- b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l)(6). These requirements include the following obligations:
- (i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph (40 CFR 122.41(l)(6)(ii)):
 - (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.
 - (ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - (iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (40 CFR 122.41(l)(6)(iii))

5. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph C.4 of this section or specific requirements of compliance schedules, at the time DMRs are submitted, on the Non-Compliance Reporting Form (3800-FM-BPNPSM0440). The reports shall contain the information listed in paragraph C.4.b.(ii) of this section. (40 CFR 122.41(l)(7))

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance

1. The permittee shall comply with all conditions of this permit. If a compliance schedule has been established in this permit, the permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit. (40 CFR 122.41(a)(1))
2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline. (25 Pa. Code § 92a.51(c), 40 CFR 122.47(a)(4))

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with 25 Pa. Code § 92a.72 and 40 CFR 122.41(f).
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. (40 CFR 122.41(f))
3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions. (40 CFR 122.41(a)(1))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. (40 CFR 122.41(h))
2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit. (40 CFR 122.41(h))
3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information. (40 CFR 122.41(l)(8))
4. The permittee shall provide the following information in the annual Municipal Wasteload Management Report, required under the provisions of Title 25 Pa. Code Chapter 94:
 - a. The requirements identified in 25 Pa. Code § 94.12.
 - b. The identity of any indirect discharger(s) served by the POTW which are subject to pretreatment standards adopted under Section 307(b) of the Clean Water Act; the POTW shall also specify the total volume of discharge and estimated concentration of each pollutant discharged into the POTW by the indirect discharger.
 - c. A "Solids Management Inventory" if specified in Part C of this permit.
 - d. The total volume of hauled-in residual and municipal wastes received during the year, by source.
 - e. The Annual Report requirements for permittees required to implement an industrial pretreatment program listed in Part C, as applicable.

D. General Pretreatment Requirements

1. Any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (MGD) and receiving from industrial users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to Pretreatment Standards will be required to establish a POTW Pretreatment Program unless specifically exempted by the Approval Authority. A POTW with a design flow of 5 MGD or less may be required to develop a POTW Pretreatment Program if the Approval Authority finds that the nature or volume of the industrial influent, treatment process upsets, violations of effluent limitations, contamination of sludge, or other circumstances warrant in order to prevent interference or pass through. (40 CFR 403.8)
2. Each POTW with an approved Pretreatment Program pursuant to 40 CFR 403.8 shall develop and enforce specific limits to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b), and shall continue to develop these limits as necessary and effectively enforce such limits. This condition applies, for example, when there are planned changes to the waste stream as identified in Part A III.C.2. If the permittee is required to develop or continue implementation of a Pretreatment Program, detailed requirements will be contained in Part C of this permit.
3. For all POTWs, where pollutants contributed by indirect dischargers result in interference or pass through, and a violation is likely to recur, the permittee shall develop and enforce specific limits for indirect dischargers and other users, as appropriate, that together with appropriate facility or operational changes, are necessary to ensure renewed or continued compliance with this permit or sludge use or disposal practices. Where POTWs do not have an approved Pretreatment Program, the permittee shall submit a copy of such limits to DEP when developed. (25 Pa. Code § 92a.47(d))

E. Proper Operation and Maintenance

1. The permittee shall employ operators certified in compliance with the Water and Wastewater Systems Operators Certification Act (63 P.S. §§ 1001-1015.1).
2. 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))

F. 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))

G. 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 paragraph G.4 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 paragraph G.2 above. (40 CFR 122.41(m)(4)(ii))
 4. Notice
 - a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass. (40 CFR 122.41(m)(3)(i))
 - b. Unanticipated Bypass – The permittee shall submit oral notice of any other unanticipated bypass within 24 hours, regardless of whether the bypass may endanger health or the environment or whether the bypass exceeds effluent limitations. The notice shall be in accordance with Part A III.C.4.b.

H. Sanitary Sewer Overflows (SSOs)

An SSO is an overflow of wastewater, or other untreated discharge from a separate sanitary sewer system (which is not a combined sewer system), which results from a flow in excess of the carrying capacity of the system or from some other cause prior to reaching the headworks of the sewage treatment facility. SSOs are not authorized under this permit. The permittee shall immediately report any SSO to DEP in accordance with Part A III.C.4 of this permit.

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

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

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

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or
- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance)

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

C. Liability

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

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

D. Need to Halt or Reduce Activity Not a Defense

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

III. OTHER RESPONSIBILITIES

A. Right of Entry

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

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

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (40 CFR 122.61(a))
2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (40 CFR 122.61(b)(1))
 - b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; and (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. (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 Department regulations. (25 Pa. Code § 92a.71)

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

C. Property Rights

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

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 FEE

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)

Small Flow Treatment Facility (SRSTP and SFTF)	\$0
Minor Sewage Facility < 0.05 MGD (million gallons per day)	\$250
Minor Sewage Facility ≥ 0.05 and < 1 MGD	\$500
Minor Sewage Facility with CSO (Combined Sewer Overflow)	\$750
Major Sewage Facility ≥ 1 and < 5 MGD	\$1,250
Major Sewage Facility ≥ 5 MGD	\$2,500
Major Sewage Facility with CSO	\$5,000

As of the effective date of this permit, the facility covered by the permit is classified in the following fee category: **Major Sewage Facility with CSO.**

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. The fees identified above are subject to change in accordance with 25 Pa. Code 92a.62(e).

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

PA Department of Environmental Protection
Bureau of Point and Non-Point Source Management
Re: Chapter 92a Annual Fee
P.O. Box 8466
Harrisburg, PA 17105-8466

PART C

I. OTHER REQUIREMENTS

- A. No stormwater from pavements, areaways, roofs, foundation drains, or other sources shall be directly admitted to the sanitary sewers associated with the herein approved discharge except in cases where excessive pollutants would otherwise enter a stormwater conduit or stream. In such cases, the City of Philadelphia may approve and/or direct in writing the admittance of the expected excessive polluted stormwater to the separate sanitary sewer.
- B. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance or replacement of all sewers or sewerage structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.
- C. Collected screenings, slurries, sludges, and other solids shall be handled and disposed of in compliance with 25 Pa. Code, Chapters 271, 273, 275, 283, and 285 (related to permits and requirements for landfilling, land application, incineration, and storage of sewage sludge), Federal Regulation 40 CFR 257, Pennsylvania Clean Streams Law, Pennsylvania Solid Waste Management Act of 1980, and the Federal Clean Water Act and its amendments. The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport, and disposal of solid waste materials generated as a result of wastewater treatment.
- D. The CBOD5 in the raw water shall be reduced by at least 86% as monthly average in accordance with the requirements of Delaware River Basin Commission Section 3.10.6.D.2 and 25 PA Code 92a.47 (g) and (h). A 24-hours composite sample should be collected at the influent to the wastewater treatment plant to calculate the percent removal. When the influent CBOD5 as monthly average is less than 150 mg/l, attainment of a monthly average effluent limit of 25 mg/l or less will be considered compliance with 86% CBOD5 removal requirement. The permittee shall monitor the influent and effluent CBOD5 once in two weeks and shall calculate a monthly percent removal achieved by the wastewater treatment plant. When the influent CBOD5 as monthly average is 150 mg/l or higher, the effluent CBOD5 shall be reduced by at least 86% as monthly average. The results shall be reported to the Department with monthly DISCHARGE monitoring Report (DMR).
- E. 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. At a minimum, permittee and their laboratories are expected to achieve the "Target Quantitation Limits (QLs)":

<u>Parameter</u>	<u>Target QLs</u>	<u>Unit</u>
Copper, Total	4.0	µg/L
Zinc, Total	5.0	µg/L
Mercury, Total	0.2	µg/L
1,2-Dichloroethane	5.0	µg/L
Tetrachloroethylene	5.0	µg/L
Trichloroethylene	5.0	µg/L
Benzidine	60	µg/L
4-4' DDT	0.05	µg/L
4-4' DDE	0.05	µg/L
4-4' DDD	0.05	µg/L
Heptachlor	0.05	µg/L
Chlordane	1.0	µg/L
Gamma-BHC	0.05	µg/L

- F. The permittee shall optimize chlorine dosages used for disinfection or other purposes to minimize the concentration of Total Residual Chlorine (TRC) in the effluent, meet applicable effluent limitations, and reduce the possibility of adversely affecting the receiving waters. Optimization efforts may include an

evaluation of wastewater characteristics, mixing characteristics, and contact times, adjustments to process controls, and maintenance of the disinfection facilities. If DEP determines that effluent TRC is causing adverse water quality impacts, DEP may reopen this permit to apply new or more stringent effluent limitations and/or require implementation of control measures or operational practices to eliminate such impacts.

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

- G. 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.
- H. The permittee shall develop a treatment facility operations and maintenance (O&M) plan addressing key wastewater processes. The plan shall be reviewed annually and updated when appropriate. The plan shall be submitted to DEP for review upon request. For the purpose of this paragraph, a key wastewater process includes any equipment or process that, if it fails, may cause the discharge of raw wastewater or wastewater that fails to meet NPDES permit discharge requirements, or a failure that may threaten human or environmental health. The O&M plan shall include the following, at a minimum:
1. A process control strategy that includes a schedule for process control sampling, monitoring, testing, and recordkeeping.
 2. A plan that identifies how key wastewater processes shall be monitored and adjusted while the facility is staffed.
 3. A plan that identifies how key wastewater processes will be monitored while the treatment facility is not staffed.
 4. For treatment plants that are impacted by wet weather flows, the permittee shall develop and implement a wet weather operations strategy that minimizes or eliminates the wash out of solids from the treatment system while maximizing the flow through the treatment plant.
 5. An emergency plan that identifies how the facility will be operated during times of emergency. For example, the plan shall detail how key wastewater processes will be repaired or replaced in the event of a failure while minimizing loss of life and property damage to the facility. This plan shall also include emergency contact numbers for local emergency response agencies, plant personnel, critical suppliers and vendors, and DEP contacts, at a minimum.
 6. A preventative maintenance plan that includes a schedule for preventative maintenance for all equipment within the treatment system. A spare parts inventory shall be included as part of this plan.
 7. A solids management plan that identifies how solids produced by the facility will be wasted, treated, and ultimately disposed of.
- I. The facility shall be operated under the charge of a responsible operator(s) certified under the Pennsylvania Water and Wastewater Systems Operations Certification Act (Act 11). The operator(s) shall comply with the continuing education requirements required under the regulations and guidelines related to Act 11.
- J. At times when the Northeast WPCP sampler equipment fails, the two samples (North and South) for the Set 1 primaries could be substituted for each other if either sampler fails; should the sample for the Set 2 primaries fail, then the sample from the backup sampler for the Set 2 primaries could be substituted for the failed sampler; and the two samples for the chlorine contact weir (North and South) could be substituted for each other should either sample fail. This substitution would apply to suspended solids and CBOD5.

- K. The permittee's method for conducting influent and effluent composite sampling, presented in letters to the DEP dated March 8, 2006, has been reviewed and approved by the DEP.
- L. In accordance with the City's NMCs and LTCPU and its supplements, the city will be reducing the frequency and volume of untreated sewage discharges through the combined sewer overflows (CSOs). In order to account for the increased loadings due to the sewage flows that exceed the treatment plant's rated hydraulic capacity; the following methods may be used for calculating and reporting mass loadings and effluent concentrations on the monthly discharge monitoring reports:
 - a. If a calendar month includes one or more days where flows exceed 315 mgd, a value of 85 percent may be used for those days for the purpose of calculating average monthly TSS percent removal. The actual TSS percent removal associated with those days shall be reported on the appropriate space provided on the DMR.
 - b. If a calendar month includes one or more days where flows exceed 315 mgd, a value of 86 percent may be used for those days for the purpose of calculating average monthly CBOD5 percent removal. The actual CBOD5 percent removal associated with those days shall be reported on the appropriate space provided on the DMR.
 - c. When daily flows exceed 315 mgd, the average monthly and average weekly TSS and CBOD5 mass loading for those days may be calculated by using the lesser of the actual load or the permit's allowable average monthly and average weekly respectively. The actual TSS percent removal associated with those days shall be reported on the appropriate space provided on the DMR.

II. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

- A. The permittee is authorized to discharge non-polluting stormwater from its site, alone or in combination with other wastewaters, through Outfalls 061 and 001.

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

- B. Preparedness, Prevention and Contingency (PPC) Plan

The permittee must develop and implement a PPC Plan in accordance with 25 Pa. Code § 91.34 following the guidance contained in DEP's "Guidelines for the Development and Implementation of Environmental Emergency Response Plans" (DEP ID 400-2200-001), its NPDES-specific addendum and the minimum requirements below. For existing facilities, the PPC Plan must be developed prior to permit issuance. For new facilities, the PPC Plan must be submitted to DEP no later than prior to startup of facility operation.

- 1. The PPC Plan must identify all potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the facility.
- 2. The PPC Plan must describe preventative measures and best management practices (BMPs) that will be implemented to reduce or eliminate pollutants from coming into contact with stormwater resulting from routine site activities and spills.
- 3. The PPC Plan must address actions that will be taken in response to on-site spills or other pollution incidents.
- 4. The PPC Plan must identify areas which, due to topography or other factors, have a high potential for soil erosion, and identify measures to limit erosion. Where necessary, erosion and sediment control measures must be developed and implemented in accordance with 25 Pa. Code Chapter 102 and DEP's "Erosion and Sediment Pollution Control Manual" (DEP ID 363-2134-008).
- 5. The PPC Plan must address security measures to prevent accidental or intentional entry which could result in an unintentional discharge of pollutants.

6. The PPC Plan must include a plan for training employees and contractors on pollution prevention, BMPs, and emergency response measures.
7. If the facility is subject to SARA Title III, Section 313, the PPC Plan must identify releases of "Water Priority Chemicals" within the previous three years. Water Priority Chemicals are those identified in EPA's "Guidance for the Determination of Appropriate Methods for the Detection of Section 313 Water Priority Chemicals" (EPA 833-B-94-001, April 1994). The Plan must include an evaluation of all activities that may result in the stormwater discharge of Water Priority Chemicals.

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

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

- Applicable DEP or federal regulations are revised, or this permit is revised;
- The Plan fails in an emergency;
- There is a change in design, industrial process, operation, maintenance, or other circumstances, in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency;
- The list of emergency coordinators or equipment changes; or
- When notified in writing by DEP.

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

C. Minimum Required BMPs

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

1. Manage sludge in accordance with all applicable permit requirements.
2. Store chemicals in secure and covered areas on impervious surfaces away from storm drains.
3. For new facilities and upgrades, design wastewater treatment facilities to avoid, to the maximum extent practicable, stormwater commingling with sanitary wastewater, sewage sludge, and biosolids.
4. Efficiently use herbicides for weed control. Where practicable, use the least toxic herbicide that will achieve pest management objectives. Do not apply during windy conditions.
5. Do not wash parts or equipment over impervious surfaces that wash into storm drains.
6. Implement infiltration techniques, including infiltration basins, trenches, dry wells, porous pavement, etc., wherever practicable.

D. Annual Inspection and Compliance Evaluation

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

Areas contributing to a stormwater discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. BMPs in the PPC Plan and

required by this permit shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of this permit or whether additional control measures are needed.

E. Stormwater Sampling Requirements

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

1. The permittee shall record stormwater sampling event information on the "Additional Information for the Reporting of Stormwater Discharge Monitoring" form (3800-PM-WSFR0083t) and submit the form as an attachment to the DMR.
2. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding storm did not yield a measurable discharge, or if the permittee is able to document that a less than 72-hour interval is representative for local storm events during the sample period.
3. Grab samples shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is not possible, a grab sample can be taken during the first hour of the discharge, in which case the discharger shall provide an explanation of why a grab sample during the first 30 minutes was not possible.

III. POTW PRETREATMENT PROGRAM IMPLEMENTATION

- A. General Requirement – The permittee shall operate and implement a POTW pretreatment program in accordance with the federal Clean Water Act, the Pennsylvania Clean Streams Law, and the federal General Pretreatment Regulations at 40 CFR Part 403. The program shall also be implemented in accordance with the permittee's approved pretreatment program and any modifications thereto submitted by the permittee and approved by the Approval Authority.
- B. Annual Report and Other Requirements – The permittee shall submit a Pretreatment Annual Report by March 31 of each year to EPA that describes the permittee's pretreatment activities for the previous calendar year. The Pretreatment Annual Report shall include a description of pretreatment activities in all municipalities from which wastewater is received at the permittee's POTW. The Pretreatment Annual Report shall include the following information, at minimum:
 1. Industrial Listing – The Annual Report shall contain an updated industrial listing providing the names and addresses of all current Significant Industrial Users (SIUs) and Non-Significant Categorical Industrial Users (NSCIUs), as defined in 40 CFR 403.3, and the categorical standard, if any, applicable to each. The listing must: (1) identify any users that are subject to reduced reporting requirements under 40 CFR 403.12(e)(3); (2) identify which users are NSCIUs; (3) identify any users that have been granted a monitoring waiver in accordance with 40 CFR 403.12(e)(2) as well as the pollutants for which the waiver was granted and the date of the last POTW sampling event for each pollutant; and (4) identify any categorical industrial users that have been given mass-based limits in place of concentration-based categorical limits in accordance with 40 CFR 403.6(c)(5) or concentration-based limits in place of mass-based categorical limits in accordance with 40 CFR 403.6(c)(6).

In addition, the Annual Report shall contain a summary of any hauled-in wastes accepted at the POTW including the source of the wastes (domestic, commercial or industrial) and the receiving location for acceptance of the wastes. For each industrial source (whether or not classified as an SIU), the report shall indicate (1) the name and address of the industrial source; (2) the average daily amount of wastewater received; (3) a brief description of the type of process operations conducted at the industrial facility; (4) whether the source facility is a categorical industrial user (including NSCIU), significant industrial users, or non-significant industrial user; and (5) any controls imposed on the user.

2. **Control Mechanism Issuance** – The Annual Report shall contain a summary of SIU control mechanism issuance, including a list of issuance, effective, and expiration dates for each SIU control mechanism. For each general control mechanism issued, provide the names of all SIUs covered by the general control mechanism and an explanation of how the users meet the criteria of 40 CFR 403.8(f)(1)(iii)(A) for issuance of a general control mechanism.
3. **Sampling and Inspection** – The Annual Report shall contain a summary of the number and types of inspections and sampling events of SIUs by the permittee, including a list of all SIUs either not sampled or not inspected, and the reason that the sampling and/or inspection was not conducted. For any user subject to reduced reporting under 40 CFR 403.12(e)(3), the list shall include the date of the last POTW sampling event and the date of the last POTW inspection of the user. In addition, the report shall include a summary of the number of self-monitoring events conducted by each SIU and the number required to be conducted, including a list of all SIUs that did not submit the required number of reports and the reason why the reports were not submitted. For NSCIUs, the report shall provide the date of the compliance certification required under 40 CFR 403.12(q).
4. **Industrial User Compliance and POTW Enforcement** – The Annual Report shall contain a summary of the number and type of violations of pretreatment standards and requirements, including local limits, and the actions taken by the permittee to obtain compliance, including compliance schedules, penalty assessments and actions for injunctive relief. The report shall state whether each SIU was in significant noncompliance, as that term is defined in 40 CFR Section 403.8(f)(2)(viii), and include the parameter(s) in violation, the period of violation, the actions taken by the POTW in response to the violations, and the compliance status at the end of the reporting period. A copy of the publication of users meeting the significant noncompliance criteria shall be included. In addition, the report shall provide a list of users previously designated as NSCIUs that have violated (to any extent) any pretreatment standard or requirement during the year and the date and description of the violation(s).
5. **Summary of POTW Operations** – The Annual Report shall contain a summary of any interference, pass-through, or permit violations by the POTW and indicate the following: (1) which, if any, permit violations may be attributed to industrial users; (2) which IU(s) are responsible for such violations; and (3) the actions taken to address these events. The report shall also include all sampling and analysis of POTW treatment plant influent, effluent, and sludge conducted during the year for local limit and priority pollutants identified pursuant to Section 303(d) of the Clean Water Act, 33 U.S.C. 1313(d).
6. **Pretreatment Program Changes** – The Annual Report shall contain a summary of any changes made or proposed to the approved program during the period covered by the report and the date of submission to the Approval Authority.

A summary of pretreatment activities shall be incorporated into the permittee's Annual Municipal Wasteload Management Report required by 25 Pa. Code Chapter 94 and referenced in Part B I.C.4 of this permit.

- C. **Routine Monitoring** – The permittee shall conduct monitoring at its treatment plant that, at a minimum, includes quarterly influent, effluent, and sludge analysis for all pollutants for which local limits have been established, and an annual priority pollutant scan for influent and sludge.
- D. **Notification of Pass Through or Interference** – The permittee shall notify EPA and DEP, in writing, of any instance of pass through or interference, as defined at 40 CFR 403.3(p) and (k), respectively, known or suspected to be related to a discharge from an IU into the POTW. The notification shall be attached to the DMR submitted to EPA and DEP and shall describe the incident, including the date, time, length, cause (including responsible user if known), and the steps taken by the permittee and IU (if identified) to address the incident. A copy of the notification shall also be sent to the EPA at the address provided below.
- E. **Headworks Analysis** – The permittee shall submit to EPA a reevaluation of its local limits based on a headworks analysis of its treatment plant within one (1) year of permit issuance, and provide a revised submission within three (3) months of receipt of comments from EPA unless a longer period of time is granted in writing by EPA. In order to ensure that the permittee's discharge complies with water quality standards, the reevaluation of local limits shall consider, at a minimum, all water quality standards under

25 Pa. Code Chapter 93 applicable to the pollutants included in the reevaluation, unless the POTW is subject to an effluent limitation for the pollutant in Part A of this permit. The list of pollutants to be evaluated, as well as a sampling plan for collection of necessary data, shall be submitted to EPA within three (3) months of permit issuance. Unless otherwise approved in writing, the list of pollutants shall include arsenic, cadmium, chromium, copper, cyanide, lead, mercury, molybdenum, nickel, selenium, silver, zinc, BOD₅, TSS, ammonia, any pollutants for which a local limit currently exists, any pollutant limited in this permit, as well as any other pollutants that have been identified in the POTW in significant quantities through monitoring or the receipt of indirect discharges and hauled-in wastes. For example, facilities receiving residual waste from oil and gas operations should include pollutants such as Total Dissolved Solids (TDS), specific ions such as chlorides and sulfates, specific radionuclides, metals such as barium and strontium, and other pollutants that could reasonably be expected to be present. Within four (4) months of acceptance of the headworks analysis by the Approval Authority, the permittee shall adopt the revised local limits and, if necessary to ensure that the limits are enforceable throughout the service area, notify all contributing municipalities of the need to adopt the revised local limits.

F. Changes to Pretreatment Program – EPA and DEP may require the permittee to submit for approval changes to its pretreatment program if any one or more of the following conditions is present:

1. The program is not implemented in accordance with 40 CFR Part 403;
2. Problems such as interference, pass through or sludge contamination develop or continue;
3. The POTW proposes to introduce new pollutants or an increased loading of approved pollutants as described in Part A III.C.2 of this permit;
4. Federal, State, or local requirements change;
5. Changes are needed to assure protection of waters of the Commonwealth.

Program modification is necessary whenever there is a significant change in the operation of the pretreatment program that differs from the information contained in the permittee's submission, as approved under 40 CFR 403.11.

G. Procedure for Pretreatment Program Changes – Upon submittal by the permittee, and written notice of approval by the Approval Authority to the permittee of any changes to the permittee's approved pretreatment program, such changes are effective and binding upon the permittee unless the permittee objects within 30 days of receipt of the written notice of approval. Any objection must be submitted in writing to EPA and DEP.

H. Correspondence – The Approval Authority shall be EPA at the following address:

Pretreatment Coordinator (3WP41)
U.S. Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

IV. COMBINED SEWER OVERFLOWS

A. Management and Control of Combined Sewer Overflows – General Requirements

1. Combined sewer overflows (CSOs) are allowed to discharge only in compliance with this permit when flows in combined sewer systems exceed the design capacity of the conveyance or treatment facilities of the system during or immediately after wet weather periods provided they are in compliance with Part C. Section IV.C. Overflows that occur without an accompanying precipitation event or snow-melt are termed "dry weather overflows" and are prohibited. CSOs are point source discharges that must be provided with control measures in accordance with the Federal Clean Water Act and the 1994 National CSO Policy.

2. The point source discharge locations (outfalls) specifically identified in the application submitted by the permittee serve as known combined sewer overflow locations in the permittee's combined sewer system (CSS).
3. The permittee's combined sewer overflows can discharge to various receiving waters. In the Northeast Drainage District, the receiving waters are the Pennypack Creek, Tookany/Tacony/Frankford Creek, Old Frankford Creek (Frankford Inlet), and Delaware River.

B. Continued Implementation of Technology-Based Nine Minimum Controls

1. Upon issuance of this permit, the permittee shall continue the implementation of the Nine Minimum Controls (NMCs), demonstrate system wide compliance with the NMCs, and submit discharge monitoring reports and annual reports to the Department with appropriate documentation. The permittee's previously-approved NMC documentation is incorporated in this permit.
2. The permittee shall comply with the following technology-based requirements:
 - a. NMC1: Conduct proper operation and maintenance programs.
 - (i) The permittee shall inspect and maintain all CSO structures, in-system storage controls, regulators, pumping stations, and tidegates to ensure that they are in good working condition and adjusted to minimize CSOs and prevent tidal inflow. The permittee shall inspect each CSO outfall at an appropriate frequency to ensure no dry weather overflows are occurring. At a minimum,
 - All pump stations shall be inspected weekly and remotely monitored;
 - All computer-controlled in-system storage sites will be maintained monthly;
 - All combined sewer regulators and tide gates will be visually inspected once per month and on average 1.5 times per site per month aggregated annually on a Northeast Drainage District basis. Inspection and maintenance frequencies should be increased for sites that require additional attention to ensure effective operation.
 - (ii) The permittee shall continue to modernize and improve operations and maintenance through the implementation of integrated data management systems, including a Geographic Information System (GIS) that describes the physical infrastructure, and various maintenance management systems to plan, schedule, and track operations and maintenance activities.
 - (iii) The permittee shall continue to utilize closed circuit television (CCTV) to support sewer inspection, repair, and rehabilitation activities.
 - (iv) The permittee shall continue to operate and maintain the structures and equipment at the existing in-line collection system storage projects, in order to optimize the in-system storage capability provided at these sites. The permittee shall also evaluate opportunities to implement additional in-system storage structures or equipment at other sites.
 - (v) During this permit term, the permittee shall train all relevant employees on its work order management systems to enhance operational performance and planning.
 - b. NMC2: Maximize the use of the collection system for storage.
 - (i) The permittee shall continue to implement a program of comprehensive monitoring and modeling to support the maximization of the use of the collection system for storage.
 - (ii) The permittee shall continue to operate and maintain a network of permanent and portable flow monitoring instruments to provide data to support system capacity analysis.
 - (iii) The permittee shall continue to evaluate opportunities for operational changes that can increase the capture and treatment of combined sewage.

- (iv) During this permit term, the permittee shall complete an evaluation of all outfalls along the Tacony/Frankford Creek to assess the need for backflow prevention structures to prevent inflow to the CSS during periods of high streamflow, and shall begin installation of backflow prevention structures where they are needed.
- c. NMC3: Review and modify the pretreatment program.
 - (i) The permittee shall continue to implement a pretreatment program to regulate the discharge of industrial waste water to the CSS, and shall continue to seek opportunities to utilize sewer discharge permit conditions to minimize the presence of non-domestic discharges in the CSS during wet weather.
- d. NMC4: Maximize flow to the POTW for treatment.
 - (i) The permittee shall continue to analyze and implement steps to maximize the wet weather flow to the POTW.
 - (ii) The permittee shall continue to use its contractual relationships with customers who convey sewage to the CSS from satellite collection systems to apply agreed upon penalties and/or incentives so that customers make continual efforts to reduce rainfall-derived peak flow rates to the levels documented in each respective agreement.
- e. NMC5: Prohibit combined sewer overflows during dry weather.
 - (i) The permittee shall continue to use a combination of regular inspections and real-time monitoring to facilitate the servicing of the CSO regulator chambers and associated tide gates, and shall service, clean, and repair these devices as necessary to prevent conditions that may result in dry weather discharges from the CSS. Regulator chambers and tide gates shall be visually inspected at a minimum, once per month and on average 1.5 times per site per month aggregated annually on a Northeast Drainage District basis.
 - (ii) The permittee shall continue to perform regular inspections and timely cleanout of the grit accumulation structures in the CSS, within the NE drainage district.
 - (iii) The permittee shall develop water/sewer bill inserts to include dry weather overflow information in order to establish a public reporting mechanism.
 - (iv) The permittee shall report dry weather overflows to the Department by telephone immediately.
- f. NMC6: Control solid and floatable materials in CSOs.
 - (i) The permittee shall continue to fund and operate a multi-crew force to perform in-stream cleanup work throughout the CSO receiving waters.
 - (ii) The permittee shall conduct a minimum of 300 stream examinations citywide on an annual basis to identify trash and debris and prioritize clean-up activities on an as needed basis upon these evaluations and report on debris removed.
 - (iii) The permittee shall continue to operate and maintain a floatables skimming vessel that will operate a minimum of 7 months every year, an average of 3 times per week, weather and mechanical issues permitting, to remove floatable debris from accessible segments of the CSO receiving waters.
 - (iv) The permittee shall continue to operate and maintain a pontoon boat at a minimum of 6 months every year on average 1 time per week in the Schuylkill and Delaware Rivers, weather and mechanical issues permitting, to remove floatable debris from accessible segments of the CSO receiving waters.

- (v) The permittee shall continue to maintain and service all of the inlets and catch basins throughout the CSS in the Northeast Drainage District. The permittee shall clean PWD operated catch basins in the combined sewer area not less than on average once annually. For those areas subject to complaint, inspections, cleanouts, and repairs of these structures shall occur on a more frequent basis. Information and data describing this work shall continue to be maintained, and shall be reported in the Annual Report.
 - (vi) The permittee shall continue to participate in a partnership effort with the local watershed association to investigate and address the problem of trash in the Tookany-Tacony-Frankford Creek. The goals of this effort should be to assess the sources of trash that is reaching the creek channel, and to develop programs to address the trash problem, either at the source or at the receiving water, if it is shown that the CSO outfalls are conveying trash to the creek channel.
 - (vii) The permittee shall consult with the Philadelphia Streets Department at least annually to coordinate litter prevention efforts with a focus on watersheds. This effort should include an attempt to identify neighborhoods that are contributing disproportionate amounts of trash to the receiving waters, and identification of practices designed to address the problem. These efforts shall be documented in the Annual Report.
 - (viii) The permittee shall inspect outfall debris grills at the time of regulator inspection, except at time of regulator inspection, except at time when the tide may submerge those grills.
- g. NMC7: Pollution prevention.
- (i) The permittee shall continue to implement its various programs for the control of pollution at its source, including litter control programs, household trash and recyclables pickup, bulk and oversize disposal, and household hazardous waste disposal.
 - (ii) The permittee shall continue to implement its ongoing programs for public information and education around the issues of non-point-source pollution, pollution prevention, and stormwater management.
- h. NMC8: Notify the public of CSOs.
- (i) The permittee shall continue to maintain its internet-based CSO public notification system called "CSOcast," which provides real-time information on the probable water quality impacts of runoff and predicted CSO discharges associated with wet weather.
 - (ii) The permittee shall continue to post and maintain CSO outfall signs to provide public awareness of CSO discharge locations, and of the potentially harmful effects of CSO discharges. Within three months of the permit effective date, the permittee shall submit to the Department for review and approval a Plan for CSO informational signage. Within twenty-four months of the Department's approval of the plan, CSO informational signs shall be placed at all CSO-impacted waterways where public access is normally possible. This shall include one kind of sign for sites providing access by land, and another kind of sign for sites providing access by boat. Where both land and water access is normally possible, the signs shall be designed and placed strategically to provide notice to all users of the area. The signs shall identify the area as a CSO discharge area, and provide a warning with respect to water contact and fishing. The signs shall also provide information that can be used by the public to provide notice to the permittee if a dry weather discharge is observed. The Plan shall include a program for inspection, maintenance, and replacement of the signs.
 - (iii) The permittee shall distribute a pamphlet annually to locations (e.g., boathouses, marinas, water sports shops) frequented by receiving water users. The pamphlet shall explain the

signage, any other warning systems, and include information similar to that listed under h.(i). above. Distribution will be to the extent permitted by owners of the locations.

- i. NMC9: Monitor to characterize CSO impacts and the efficacy of CSO controls.
 - (i) The permittee shall report on the status and effectiveness of each of the Nine Minimum Controls in the Annual CSO Status Report. The Annual CSO Status Report shall continue to include information about operation and maintenance program implementation as well as results of CSS monitoring and modeling, including CSO discharge frequency and volume for the year.

C. Implementation of Water Quality-Based Long Term Control Plan (LTCP)

1. The Long Term Control Plan (LTCP) for the City of Philadelphia CSS, including supplements thereto, provides for the control of CSO discharges to comply with the water quality standards found in PA Title 25, Chapter 93 of the Rules and Regulations of DEP.
2. The permittee shall continue the implementation of the approved LTCP, demonstrate system-wide compliance with the implementation of the LTCP, and submit, with the Annual Report referenced in paragraph E.3. below, annual progress reports on implementation. The approved LTCP consists of the approved 1997 Long Term Control Plan, the approved 2009 Long Term Control Plan Update, and various other documents approved as supplements to those Plans.
3. The requirements of a LTCP are described in the EPA's guidance document entitled "Guidance For Long Term Control Plan" (EPA 832-B-95-002), dated September 1995. The permittee shall periodically review the effectiveness of the LTCP and propose any changes or revisions to the LTCP to the Department for review and approval before its implementation.
4. The permittee shall ensure inspection, monitoring and effective operation and maintenance of the CSO controls identified in the LTCP.
5. The permittee shall implement the controls pursuant to the LTCP implementation schedule, which is incorporated herein by reference. Notwithstanding any other provisions of this permit, the permittee will achieve the interim steps or milestones identified in the LTCP, including but not limited to the following as listed below:
 - a. The permittee shall continue to implement capital improvements at the Northeast Water Pollution Control Plant (WPCP), and in the CSS serving this plant, to maximize the capacity of the plant and collector system to capture and treat wet weather flows. The capital improvements to be implemented shall include, but may not be limited to, the specific projects listed below:
 - (i) The permittee shall prepare a Wet Weather Facility Plan to provide details on the projects presented in the Facility Concept Plan. The Wet Weather Facility Plan shall be submitted according to the schedule provided in Section IV.H.
 - (ii) Rehabilitation of the Frankford High Level Second Barrel (78-inch sewer) will be completed within the term of this permit.
 - (iii) The permittee shall carry out studies to evaluate the potential to gain additional capacity improvements in the collector system with additional capital projects. Results and recommendations will be provided in the Wet Weather Facility Plan.
 - (iv) The permittee shall implement a Secondary Treatment Bypass project to allow up to 215 million gallons per day (mgd) of primary sedimentation tank effluent to be conveyed directly to the disinfection process during wet weather periods when the plant is treating flows of at least 435 mgd.

- (v) The permittee shall construct gravity sludge thickeners to improve the operation of the primary sedimentation process. By the interim milestone date of October 30, 2016, construction of the Gravity Sludge Thickeners project shall be at least 25% complete.
- (vi) The permittee shall construct an additional preliminary treatment facility to add capacity in the screening and grit removal processes. By the interim milestone date of October 30, 2016 the design of the Preliminary Treatment Process Building #2 project shall be at least 50% complete.
- b. The permittee shall implement a program that provides for the construction, operation, and maintenance of Green Stormwater Infrastructure (GSI) throughout the combined sewer service area, as described in the LTCP. The permittee's progress in providing for the implementation of GSI shall be tracked using a reporting metric called "Greened Acres." Greened Acres shall be understood as a quantitative expression of the volume of stormwater that can be managed by a GSI project. The Greened Acres value for a particular GSI project is based on the design for that project, and is conditional on the proper operation and maintenance of that project. One Greened Acre (GA) is equivalent to one inch of managed stormwater runoff from one acre of impervious drainage area.

The permittee shall comply with the following performance standards, which shall be applied to the CSS on a City-wide basis comprising the City's three drainage districts:

- (i) By October 30, 2016, the permittee shall document completion of GSI projects sufficient to account for not less than 744 Greened Acres.
- (ii) The permittee shall perform inspections and maintenance on City-owned GSI projects at a frequency adequate to ensure their continued effective operation.
- (iii) The permittee shall maintain adequate legal authority to require the continued proper maintenance of all GSI projects that are accounted for with a Greened Acres value and that are not the property of the City. The permittee shall perform inspections at non-City-owned GSI projects at a frequency adequate to ensure their continued effective operation.
- c. The permittee shall continue to use hydrologic and hydraulic modeling, validated by metered sewer flow data, to develop their understanding of how the CSS responds to rain events, and to report on the volume of overflows from the CSS.

The permittee shall comply with the following performance standards, which shall be applied to the CSS on a City-wide basis comprising the City's three drainage districts.

- (i) By October 30, 2016, the permittee shall document an overflow reduction of 600 million gallons per year as compared to the baseline. The baseline condition is represented by Philadelphia's physical systems (land cover, and CSS and treatment plant infrastructure) as they were configured on January 1, 2006. Overflow volumes for both the baseline condition and existing condition (or test condition being evaluated) shall be determined using climatic data representing the same "typical year" for Philadelphia's climate.
- D. The permittee will eliminate or remove no less than the mass of pollutants (fecal coliform bacteria, by number, Five-day Biochemical Oxygen Demand, by mass, and Total Suspended Solids, by mass) that otherwise would be removed by the capture of 85% by volume of the combined sewage collected in the CSS during precipitation events on a system-wide annual average basis. A long term compliance schedule for this requirement is contained in the Consent Order and Agreement dated June 1, 2011.

E. Monitoring and Reporting Requirements

1. Comprehensive Monitoring Plan

The permittee shall continue to implement its Comprehensive Monitoring Plan, which is designed and intended to determine the effectiveness of the CSO control program in meeting Pennsylvania water quality standards and the requirements of the Federal Clean Water Act. The Comprehensive Monitoring Plan addresses monitoring and modeling of the CSS; monitoring and modeling of the CSO receiving waters; and performance monitoring of CSS components including various types of stormwater management practices. Data produced through the implementation of the Comprehensive Monitoring Plan will be used to prepare the DMR Supplemental Reports, the Annual Reports, and other CSO-related reports and plans. For the term of this permit, the proper implementation of the Comprehensive Monitoring Plan shall constitute "Post-Construction Monitoring" as it is required in Federal CSO Policy.

2. Discharge Monitoring Report (DMR) Supplemental Reports for Combined Sewer Overflows.

The permittee shall record data on CSO discharges and provide it to DEP quarterly in a DMR Supplemental Report for CSOs. The data shall be submitted to the Southeast Regional office of the Department within 45 days of the end of the calendar quarter (April 30, June 30, September 30, and December 31). Copies of the DMR Supplemental Reports for CSOs must be retained at the Sewage Treatment Plant (STP) site for at least three (3) years. These reports shall include the following:

- a. The number of inspections conducted at each CSO unit per month, along with a summary of the inspection results (i.e. discharges detected or maintenance activities performed).
- b. Details of all dry weather discharges that occurred in the month, including location, date and time observed, date and time stopped, date and time of last previous inspection at that CSO regulator, and comments explaining the cause of the discharge.
- c. Daily rainfall totals for the period, in inches per day.
- d. Wet weather discharge event data based on hydrologic and hydraulic modeling. Model data shall be used to report all discharges from all CSO regulator units as hours per discharge event, along with the start and end times for the rainfall events that caused the discharges.
- e. When notified by DEP in writing, the permittee shall submit the CSO Supplemental DMRs to DEP using its electronic Discharge Monitoring Report (eDMR) system.

3. Annual CSO Status Report

On September 30 of each year, an Annual CSO Status Report shall be submitted to the Department, where the permittee shall describe information pertinent to the past year's activities, without duplication from previous years' reports.

- a. The Annual CSO Status Report shall:
 - (i) Provide an identification of known in-stream water quality impacts, their causes, and their effects on downstream water users;
 - (ii) Summarize all actions taken to implement the NMCs and their effectiveness;
 - (iii) Summarize all actions taken to implement the LTCP and their effectiveness.
 - (iv) Evaluate and provide a progress report on implementing the NMCs and the LTCP and necessary revisions to the NMC and LTCP.
 - (v) Provide a status update on the implementation of the approved Comprehensive Monitoring Program.

- b. In addition to the information required in Section E.3.a. above, the following CSO-related information shall also be included in the Annual Report:
- (i) A brief description of the activities of the Flow Control Unit for the past year.
 - (ii) Detailed data describing all CSO inspections, maintenance activities, and dry weather discharges at all CSO regulators, City-wide, for the year.
 - (iii) Results of analyses of aggregated discharge and maintenance activity data, conducted as necessary at the discretion of the permittee, to evaluate trends over time, by season, and/or by location.
 - (iv) Wet weather overflow summary data based on hydrologic and hydraulic modeling showing annual totals, by CSO regulator, for number of events, total cumulative discharge duration (hours per year), and total cumulative discharge volume (reported as either cubic meters per year or million gallons per year).
 - (v) Data showing the year's rainfall in inches per day as recorded at the permittee's rain gauges.
 - (vi) Capital Projects in collector system and WPCPs

Provide a report on the status of capital projects described in the LTCP, including collector system improvements, sewer disconnection projects, and projects for increasing wet weather capacity at the WPCPs.
 - (vii) Stormwater Management Practice implementation

Provide a status report on the implementation of stormwater management practices in the CSS. Include information about City-funded projects, privately-funded projects, and projects funded using financing through the Pennsylvania Infrastructure Investment Authority (PennVest).
 - (viii) Comprehensive Monitoring Plan implementation

Provide a status report concerning implementation of the Comprehensive Monitoring Plan, including information about the Pilot Project program for detailed SMP monitoring.

4. Evaluation and Adaptation Plan

The permittee shall submit, by no later than October 30, 2016, an Evaluation and Adaptation Plan (EAP). The EAP shall be a comprehensive assessment of the permittee's progress with implementing the approved LTCP up until that time, and should supplement, without duplicating, the information provided in that year's Annual Report. The EAP shall include the following components:

- a. Performance tracking of the CSO program based on hydrologic/hydraulic modeling with validation using flow monitoring.
- b. An up-to-date value for Greened Acres to represent stormwater management practices that have been constructed and are in service in the CSS area, as described in Paragraph C.5.b. above. Details should be provided about the SMP projects that are represented by the Greened Acres values reported.
- c. An up-to-date value for Overflow Reduction Volume as described in Paragraph C.5.c. above, along with a description of the modeling processes and key modeling assumptions used in the calculation. This report shall include a statement concerning the volume percent capture for the CSS as a whole, City-wide, and an explanation of the relative contributions of stormwater management practices and non-stormwater infrastructure projects to the modeled reduction of overflow volume.

- d. An assessment of the permittee's progress with implementing interceptor sewer lining, as described in the LTCP.
- e. A statement concerning the performance of the CSS expressed as percent mass capture of Total Suspended Solids, Five-day Biochemical Oxygen Demand, and fecal coliform bacteria during wet weather flow events as a cumulative annual mass.
- f. An assessment of how the Greened Acres and Overflow Reduction Volumes being reported compare to the interim compliance values given in Sections C.5.b. and C.5.c. In the event that the values reported are less than the interim compliance values given in this permit, the EAP shall include a detailed proposal for actions the permittee proposes to take to address the deficit.
- g. An assessment of the permittee's progress with implementing the WPCP capital improvement projects described in Section C.5.a. In the event that the progress on any capital improvement project is less than the value required in Section C.5.a., the EAP shall include a detailed proposal for actions the permittee proposes to take to address the issue.
- h. A description of the program elements anticipated to be implemented in the upcoming five-year period.
- i. An assessment of the effectiveness of the LTCP, along with any proposed revisions to the plan for implementation of the LTCP.

F. Watershed-Based Planning

The permittee shall continue to implement its Watershed-based planning program, including the continued development and implementation of Integrated Watershed Management Plans and Implementation Plans for the CSO receiving waters. Specific tasks associated with this project include the following:

- 1. Support the ongoing facilitation of the watershed partnerships to discuss watershed restoration issues and efforts to collaborate through the Southeastern PA Watershed Alliance.
- 2. Complete a report updating that status of watershed indicators in the Tookany/Tacony/Frankford and Cobbs Creek Watersheds based on PWD's monitoring data and additional watershed planning analyses.

G. Permit Reopener Clause

The Department reserves the right to modify, revoke and reissue this permit as provided pursuant to 40 CFR 122.62 and 124.5 and for the following reasons:

- 1. To include new or revised conditions developed to comply with any State or Federal law or regulation that addresses CSOs and that is adopted or promulgated subsequent to the effective date of this permit.
- 2. To include new or revised conditions if new information indicates that CSO controls imposed under the permit have failed to ensure the attainment of State Water Quality Standards.
- 3. To include new or revised conditions based on new information resulting from implementation of the LTCP or other plans or data.

H. Combined Sewer Overflow Deliverable Schedule

The permittee shall complete the above CSO activities in accordance with the following compliance schedule:

Schedule Activity Description

Compliance Due Date

Continue Implementation of the NMCs

Permit effective date

Continue Implementation of the LTCP

Permit effective date

Submit Annual CSO Status Report to Department

September 30 of each year

Submit DMR Supplemental Reports for CSOs

Within 45 days of the end of each calendar quarter

Scheduled Interim Milestones

Compliance Due Date

Submit Wet Weather Facility Plan for the Northeast WPCP

June 1, 2016

Submit first Evaluation and Adaptation Plan

October 30, 2016

Document that construction of the Frankford High Level Second Barrel Rehabilitation project is complete.

October 30, 2016

Document that construction of the Secondary Treatment Bypass project is at least 50% complete.

November 30, 2016

Document that construction of the Gravity Sludge Thickeners Project is at least 25% complete.

October 30, 2016

Document that design of the Additional Preliminary Treatment Building #2 project is at least 50% complete.

October 30, 2016

Document that the implementation of Green Stormwater Infrastructure in the CSS has been achieved to the extent of 744 Greened Acres.

October 30, 2016

Document that the annual average volume discharged from the CSOs has been reduced by at least 600 million gallons per year below the baseline value as defined in the LTCP.

October 30, 2016

V. PCB MINIMIZATION PLAN AND MONITORING

- A. On December 15, 2003, the U.S. Environmental Protection Agency (EPA), Regions 2 and 3, adopted a Total Maximum Daily Load (TMDL) for Polychlorinated Biphenyls (PCBs) for Zones 2, 3, 4, and 5 of the tidal Delaware River. The TMDLs require the facilities identified as discharging PCBs to these zones of the Delaware River or to the tidal portions of tributaries to these zones to conduct monitoring for 209 PCB congeners, and prepare and implement a PCB Pollutant Minimization Plan (PMP). Subsequent monitoring required by DRBC in 2005 confirmed the presence of PCBs, and indicates that this facility does not contribute to 99 percent of the cumulative loadings from all point sources.
- B. The permittee shall collect 2 (two) 24-hour composite samples annually during a wet weather flow and 2 (two) 24-hour composite samples annually during a dry weather flow. The samples shall be collected from Outfall 001.
- C. All sample analyses shall be performed using EPA Method 1668A, Revision A: Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by HRGC/HRMS. EPA-821-R-00-002, December 1999 as supplemented or amended, and results for all 209 PCB congeners shall be reported. Project-specific, sample collection protocols, analytical procedures, and reporting requirements at

<http://www.state.nj.us/drbc/quality/toxics/pcbs/monitoring.html> shall be followed. Monitoring information, sample data, and reports associated with PCB monitoring shall be submitted to the DEP and the Delaware River Basin Commission (DRBC) in the form of two compact discs in the format referenced at <http://www.state.nj.us/drbc/library/documents/PCB-EDD011309.pdf>.

In accordance with the U.S. EPA, Regions 2 and 3, TMDLs for PCBs for Zones 2–5 of the Tidal Delaware River, the permittee submitted a PMP for PCBs to the DRBC, which was approved on **January 3, 2006**. The permittee shall continue to comply with the requirements of Section 4.30.9 of DRBC's Water Quality Regulations. Therefore, the permittee shall:

1. Continue to implement the PMP to achieve PCB loading reduction goals.
2. Submit an Annual Report on the yearly anniversary of the commencement of the PMP to DRBC and DEP consistent with the guidance specified at <http://www.state.nj.us/drbc/programs/quality/pmp.html>.

The PMP Annual Report and PCB data shall be submitted to the 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 & Assessment Branch
P.O. Box 7360
West Trenton, NJ 08628

V. WHOLE EFFLUENT TOXICITY (WET)

A. General Requirements

1. The permittee shall conduct chronic and acute WET tests as specified in this section. The permittee shall collect discharge samples and perform WET tests to generate chronic survival and reproduction and acute survival data for the cladoceran, *Ceriodaphnia dubia* and chronic survival and growth and acute survival data for the fathead minnow, *Pimephales promelas*.
2. Samples shall be collected at Outfall 001 in accordance with paragraph E.
3. The permittee shall perform testing using the following dilution series: 4%, 9%, 30%, 60% and 100% effluent, with a control, where 9% is the facility-specific Target In-Stream Waste Concentration (TIWC).
4. The determination of whether a test endpoint passes or fails shall be made using DEP's WET Analysis Spreadsheet (available at www.depweb.state.pa.us/wett) by comparing replicate data for the control with replicate data for the TIWC dilution or any dilution greater than the TIWC.
5. The permittee shall submit only valid WET test results to DEP and DRBC.

B. Test Frequency and Reporting

1. WET testing shall be conducted quarterly, beginning within 30 days of the permit effective date. Tests shall be completed within calendar quarters, i.e., one test each during the periods of January 1 – March 31, April 1 – June 30, July 1 – September 30, and October 1 – December 31. A complete WET test report shall be submitted to the DEP regional office that issued the permit within 45 days of test completion. A complete WET test report submission shall include the information contained in paragraph H, below.
2. If a test failure is determined for any endpoint during quarterly monitoring, the permittee shall initiate a re-test for the species with the failure, at a minimum, within 45 days of test completion. All endpoints for the species shall be evaluated in the re-test. The results of the re-test shall be submitted to the DEP regional office that issued the permit.

3. If a passing result is determined for all endpoints in a re-test, the permittee continue with quarterly monitoring, as applicable.
4. If there is a failure for one or more endpoints in a re-test, the permittee shall continue quarterly WET testing for both species until there are four consecutive passing results for all endpoints. The results of all tests shall be submitted to the DEP regional office that issued the permit and the DRBC. In addition, if there is a second quarterly WET test and retest failures for the same species the permittee shall initiate a Phase I Toxicity Reduction Evaluation (TRE) as specified in paragraph C, below.
5. The permittee must report the results of each test endpoint that has a WET limit in Part A of this permit on the Discharge Monitoring Report (DMR). Test results shall be reported on the DMR in terms of acute or chronic Toxicity Units (TUa or TUC), where TUa is used for acute tests and TUC is used for chronic tests. If DEP's WET Analysis Spreadsheet indicates a passing result for an endpoint, report the value obtained from the expression " $1/\text{TIWC}$ ", which is equivalent to the permit limit. If the Spreadsheet indicates a failure, report the value obtained from the expression " $> 1/\text{TIWC}$ ". If a dilution higher than the TIWC dilution is used for the comparison with the control, report the value obtained from the expression " $1/\text{dilution}$ ". For example, an acute test endpoint failure at a TIWC dilution of 50% would be reported as " $> 2.0 \text{ TUa}$ " ($1/0.5$).
6. The permittee shall attach a completed WET Analysis Spreadsheet for the latest four consecutive WET tests to the NPDES permit renewal application that is submitted to DEP at least 180 days prior to the permit expiration date.

C. Phase I Toxicity Reduction Evaluation (TRE)

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

5. Re-tests during the TRE process are required for invalid tests but are optional and at the discretion of the permittee for valid tests. The results of all re-tests must be submitted to the DEP regional office that issued the permit and the DRBC along with the required elements in paragraph H.

D. Phase II Toxicity Reduction Evaluation (TRE)

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

E. Sample Collection

For each acute testing event, a 24-hour flow-proportioned or time weighted composite sample shall be collected. For each chronic testing event, three 24-hour flow-proportioned or time weighted composite samples shall be collected over a seven day exposure period. The samples must be collected at a frequency of not greater than every two hours and must be flow-proportioned or time weighted. The samples must be collected at the permit compliance sampling location. Samples must be analyzed within 36 hours from the end of the compositing period and must be placed on ice and held at $\leq 6^{\circ}\text{C}$. Refer to the sample handling and preservation regulations set forth in 40 CFR 136, 25 Pa. Code Chapter 252, The NELAC Institute (TNI) Standard, and the appropriate EPA methods.

F. Test Conditions and Methods

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

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

G. Chemical Analyses

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

1. Chemical analysis on effluent samples shall include pH, Conductivity, Total Alkalinity, Total Hardness, Total Residual Chlorine, Total Ammonia (Unionized Ammonia), Dissolved Oxygen and temperature.

Chemical analyses as described in the EPA Methods (above) shall be performed for each sampling event, including each new batch of dilution water and each testing event.

2. In addition to the chemical analyses required above, those parameters listed in Part A (except PCBs) of the NPDES permit for the outfall(s) tested shall be analyzed concurrently with the WET test by using the method(s) specified in the permit.

H. WET Report Elements

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

1. A general test description, including the origin and age of test organisms, dates and results of reference toxicant tests, light and temperature regimes, and other documentation that QA and test acceptability criteria as specified in EPA's methods and DEP's QA Summaries have been met.
2. A description of sample collection procedures and sampling location.
3. Name(s) of individual(s) collecting and transporting samples, including sample renewals, and the date(s) and time(s) of sample collection.
4. All chemical and physical data including laboratory quantitation limits and observations made on the species. The hardness shall be reported for each test condition.
5. Copies of raw data sheets and/or bench sheets with data entries and signatures.
6. The LC50 for acute tests and the IC25 for survival and reproduction or growth chronic tests. The results of the statistical tests (such as TOXCALC) used shall also be provided preferably in electronic form.
7. When effluents are dechlorinated, dechlorination procedures must be described and if applicable a thiosulfate control used in addition to the normal dilution water control. If the thiosulfate control results are significantly different from the normal control, as determined using DEP's WET Analysis Spreadsheet, the thiosulfate control shall be used in the spreadsheet for comparison with the TIWC condition. The WET report must specify which control was used to determine whether the test result is pass or fail.
8. A description of all observations or test conditions that may have affected the test outcome.
9. Control charts for the species tested regarding age, temperature test range, mortality data and all reference toxicant tests.
10. A completed WET test summary report (3800-FM-BPNPSM0485).
11. A DEP WET Analysis Spreadsheet printout that provides control and TIWC replicate data and displays the outcome of the test (pass or fail) for each endpoint tested.

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



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME Northeast WPCP

CLIENT Philadelphia Water Department

ADDRESS 1101 Market Street, 5th Floor

Philadelphia, PA 19107-2994

LOCATION City of Philadelphia

Philadelphia County

WATERSHED 3J

PA0026689	001
PERMIT NUMBER	OUTFALL NUMBER

Reporting Frequency: Monthly

DMR Effective From: Permit Effective Date

DMR Effective To: Permit Expiration Date

Permit Expires:

Permit Application Due:

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
BOD5 Raw Sewage Influent	SAMPLE MEASUREMENT	Report Avg Mo	*****	*****	*****	*****			
	PERMIT REQUIREMENT	Report Avg Mo	*****	*****	*****	*****		2/week	24-Hr Composite
CBOD20	SAMPLE MEASUREMENT	71,760 Avg Mo	*****	*****	*****	*****			
	PERMIT REQUIREMENT	71,760 Avg Mo	*****	*****	*****	*****		2/week	24-Hr Composite
CBOD5 Minimum % Removal	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****		1/day	Calculation
Total Suspended Solids	SAMPLE MEASUREMENT	52,540 Avg Mo	*****	*****	*****	*****			
	PERMIT REQUIREMENT	52,540 Avg Mo	*****	*****	*****	*****		1/day	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	SAMPLE MEASUREMENT	Report Avg Mo	*****	*****	*****	*****			
	PERMIT REQUIREMENT	Report Avg Mo	*****	*****	*****	*****		1/day	24-Hr Composite
Total Suspended Solids Minimum % Removal	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****		1/day	Calculation
Total Dissolved Solids	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	*****	*****	*****	*****		1/week	24-Hr Composite
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER							TELEPHONE		DATE
TYPED OR PRINTED							AREA CODE		MO
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT							NUMBER		DAY

COMMENTS (Report all violations on the "Non-Compliance Reporting Form")



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DEPARTMENT OF ENVIRONMENTAL PROTECTION
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PARAMETER	SAMPLE MEASUREMENT PERMIT REQUIREMENT	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE		
		VALUE	UNITS	VALUE	VALUE	UNITS						
Flow	MEASUREMENT			*****	*****	*****						
	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max	*****	*****	*****						
pH	MEASUREMENT	*****	*****	*****	*****	*****			Continuous	Metered		
	PERMIT REQUIREMENT	*****	*****	6.0 Inst Min	*****	9.0 IMAX		1/day	Grab			
Dissolved Oxygen	MEASUREMENT	*****	*****	*****	*****	*****						
	PERMIT REQUIREMENT	*****	*****	Report Min	Report Avg Mo	*****		1/day	Grab			
Total Residual Chlorine	MEASUREMENT	*****	*****	*****	*****	*****						
	PERMIT REQUIREMENT	*****	*****	*****	0.5 Avg Mo	1.0 IMAX		1/day	Grab			
Specific Conductance	MEASUREMENT	*****	*****	*****	*****	*****						
	PERMIT REQUIREMENT	*****	*****	*****	Report Avg Mo	Report Daily Max		1/week	Composite			
CBOD5 Raw Sewage Influent	MEASUREMENT	*****	*****	*****	*****	*****						
	PERMIT REQUIREMENT	Report Avg Mo	*****	*****	Report Avg Mo	*****		1/day	24-Hr Composite			
CBOD5	MEASUREMENT	36,430 Avg Mo	54,645 Wkly Avg	*****	*****	*****						
	PERMIT REQUIREMENT	*****	*****	*****	25 Avg Mo	40 Wkly Avg		1/day	24-Hr Composite			
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT				TELEPHONE		DATE				
TYPED OR PRINTED						AREA CODE		NUMBER		YEAR	MO	DAY
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pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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PARAMETER	SAMPLE MEASUREMENT PERMIT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
BOD5 Raw Sewage Influent	SAMPLE MEASUREMENT	Report Avg Mo	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	Report Avg Mo	*****	*****	*****	*****	*****	2/week	24-Hr Composite	
CBOD20	SAMPLE MEASUREMENT	71.760 Avg Mo	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	71.760 Avg Mo	*****	*****	*****	*****	*****	2/week	24-Hr Composite	
CBOD5 Minimum % Removal	SAMPLE MEASUREMENT	Report Avg Mo	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	Report Avg Mo	*****	*****	*****	*****	*****	1/day	Calculation	
Total Suspended Solids	SAMPLE MEASUREMENT	52.540 Avg Mo	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	52.540 Avg Mo	*****	*****	*****	*****	*****	1/day	24-Hr Composite	
Total Suspended Solids Raw Sewage Influent	SAMPLE MEASUREMENT	Report Avg Mo	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	Report Avg Mo	*****	*****	*****	*****	*****	1/day	24-Hr Composite	
Total Suspended Solids Minimum % Removal	SAMPLE MEASUREMENT	Report Avg Mo	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	Report Avg Mo	*****	*****	*****	*****	*****	1/day	Calculation	
Total Dissolved Solids	SAMPLE MEASUREMENT	Report Avg Mo	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	Report Avg Mo	*****	*****	*****	*****	*****	1/week	24-Hr Composite	
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			TELEPHONE		DATE			
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 Northeast WPCP
 Philadelphia Water Department
 1101 Market Street, 5th Floor
 Philadelphia, PA 19107-2994
 City of Philadelphia
 Philadelphia County
 3J

NAME

CLIENT

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LOCATION

WATERSHED

PA0026699
PERMIT NUMBER

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	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Fecal Coliform	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	*****	200 Geo Mean	1,000* IMAX	*****		1/day	Grab
Ammonia-Nitrogen	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	*****	35 Avg Mo	70 Daily Max	*****		1/week	24-Hr Composite
Nitrate as N	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	*****	Report Avg Mo	Report Daily Max	*****		1/week	24-Hr Composite
Nitrite as N	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	*****	Report Avg Mo	Report Daily Max	*****		1/week	24-Hr Composite
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	*****	Report Avg Mo	Report Daily Max	*****		1/week	24-Hr Composite
Total Phosphorus	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	*****	Report Avg Mo	Report Daily Max	*****		1/week	24-Hr Composite
Total Copper	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	*****	Report Avg Mo	Report Daily Max	*****		1/month	24-Hr Composite
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT				TELEPHONE		DATE	
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I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

* Shall not exceed in more than 10 % samples tested



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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME Northeast WPCP
CLIENT Philadelphia Water Department
ADDRESS 1101 Market Street, 5th Floor
Philadelphia, PA 19107-2994
LOCATION City of Philadelphia
Philadelphia County
WATERSHED 3J

PA0026689
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OUTFALL NUMBER

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			TO		

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Color	SAMPLE MEASUREMENT	*****			*****				
	PERMIT REQUIREMENT	*****		Report Avg Mo	*****	Report Daily Max	Pl-Co Units	1/week	24-Hr Composite
Dissolved Iron	SAMPLE MEASUREMENT	*****			*****				
	PERMIT REQUIREMENT	*****		Report Avg Mo	*****	*****	mg/L	1/month	24-Hr Composite
Total Iron	SAMPLE MEASUREMENT	*****			*****				
	PERMIT REQUIREMENT	*****		Report Avg Mo	*****	*****	mg/L	1/month	24-Hr Composite
Total Mercury	SAMPLE MEASUREMENT	*****			*****				
	PERMIT REQUIREMENT	*****		Report Avg Mo	*****	*****	mg/L	1/month	24-Hr Composite
Total Zinc	SAMPLE MEASUREMENT	*****			*****				
	PERMIT REQUIREMENT	*****		Report Avg Mo	*****	*****	mg/L	1/month	24-Hr Composite
1,2-Dichloroethane	SAMPLE MEASUREMENT	*****			*****				
	PERMIT REQUIREMENT	*****		Report Avg Mo	*****	*****	mg/L	1/month	Grab
Tetrachloroethylene	SAMPLE MEASUREMENT	*****			*****				
	PERMIT REQUIREMENT	*****		Report Avg Mo	*****	*****	mg/L	1/month	Grab
Trichloroethylene	SAMPLE MEASUREMENT	*****			*****				
	PERMIT REQUIREMENT	*****		Report Avg Mo	*****	*****	mg/L	1/month	Grab

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

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 ADDRESS 1101 Market Street, 5th Floor
 Philadelphia, PA 19107-2994
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PA0026689
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MONITORING PERIOD
 YEAR MO DAY TO YEAR MO DAY

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	VALUE	UNITS	VALUE	VALUE	VALUE							
4,4-DDD	SAMPLE MEASUREMENT	*****		*****								
	PERMIT REQUIREMENT	*****		*****	Report Avg Mo	mg/L		1/quarter	24-Hr Composite			
4,4-DDT	SAMPLE MEASUREMENT	*****		*****								
	PERMIT REQUIREMENT	*****		*****	Report Avg Mo	mg/L		1/quarter	24-Hr Composite			
4,4-DDE	SAMPLE MEASUREMENT	*****		*****								
	PERMIT REQUIREMENT	*****		*****	Report Avg Mo	mg/L		1/quarter	24-Hr Composite			
Benzidine	SAMPLE MEASUREMENT	*****		*****								
	PERMIT REQUIREMENT	*****		*****	Report Avg Mo	mg/L		1/quarter	24-Hr Composite			
Chlordane	SAMPLE MEASUREMENT	*****		*****								
	PERMIT REQUIREMENT	*****		*****	Report Avg Mo	mg/L		1/quarter	24-Hr Composite			
gamma-BHC	SAMPLE MEASUREMENT	*****		*****								
	PERMIT REQUIREMENT	*****		*****	Report Avg Mo	mg/L		1/quarter	24-Hr Composite			
Heptachlor	SAMPLE MEASUREMENT	*****		*****								
	PERMIT REQUIREMENT	*****		*****	Report Avg Mo	mg/L		1/quarter	24-Hr Composite			
<p>I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).</p>												
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER						TELEPHONE		DATE				
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	VALUE	UNITS	VALUE	UNITS					
Chronic Toxicity - Pimephales Survival	SAMPLE MEASUREMENT	*****	*****	*****	TUc		1/quarter	24-Hr Composite	
	PERMIT REQUIREMENT	*****	*****	Report Daily Max					
Chronic Toxicity - Ceriodaphnia Survival	SAMPLE MEASUREMENT	*****	*****	*****	TUc		1/quarter	24-Hr Composite	
	PERMIT REQUIREMENT	*****	*****	Report Daily Max					
Chronic Toxicity - Ceriodaphnia Reproduction	SAMPLE MEASUREMENT	*****	*****	*****	TUc		1/quarter	24-Hr Composite	
	PERMIT REQUIREMENT	*****	*****	Report Daily Max					
Chronic Toxicity - Pimephales Growth	SAMPLE MEASUREMENT	*****	*****	*****	TUc		1/quarter	24-Hr Composite	
	PERMIT REQUIREMENT	*****	*****	Report Daily Max					
Acute Toxicity - Pimephales Survival	SAMPLE MEASUREMENT	*****	*****	*****	TUa		1/quarter	24-Hr Composite	
	PERMIT REQUIREMENT	*****	*****	Report Daily Max					
Acute Toxicity - Ceriodaphnia Survival	SAMPLE MEASUREMENT	*****	*****	*****	TUa		1/quarter	24-Hr Composite	
	PERMIT REQUIREMENT	*****	*****	Report Daily Max					
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. On my inquiry, the person(s) who prepared this document are not aware of any falsification of the information submitted for this report. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		AREA CODE	NUMBER	YEAR	MO	DAY
TYPED OR PRINTED									
COMMENTS (Report all violations on the "Non-Compliance Reporting Form")									



PERMITTEE NAME/ADDRESS

NAME Northeast WPCP

CLIENT Philadelphia Water Department

ADDRESS 1101 Market Street, 5th Floor

Philadelphia, PA 19107-2994

LOCATION City of Philadelphia

Philadelphia County

WATERSHED 3J

PA0026689
PERMIT NUMBER

001
OUTFALL NUMBER

Reporting Frequency: Semi-Annually

DMR Effective From: Permit Effective Date

DMR Effective To: Permit Expiration Date

Permit Expires:

Permit Application Due:

Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE		
	VALUE	UNITS	VALUE	VALUE	UNITS						
PCBs (Dry Weather)	SAMPLE MEASUREMENT	*****		*****							
	PERMIT REQUIREMENT	*****		*****		Report Max		2/year	24-Hr Composite		
	SAMPLE MEASUREMENT	*****		*****							
	PERMIT REQUIREMENT	*****		*****		Report Max		2/year	24-Hr Composite		
PCBs (Wet Weather)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
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I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to Unsworn Testimony).											
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER							TELEPHONE		DATE		
TYPED OR PRINTED							AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS (Report all violations on the "Non-Compliance Reporting Form")



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME Northeast WPCP

CLIENT Philadelphia Water Department

ADDRESS 1101 Market Street, 5th Floor

Philadelphia, PA 19107-2994

LOCATION City of Philadelphia

Philadelphia County

WATERSHED 3J

PA0026689
PERMIT NUMBER

061
OUTFALL NUMBER

Reporting Frequency: Annually

DMR Effective From: Permit Effective Date

DMR Effective To: Permit Expiration Date

Permit Expires:

Permit Application Due:

___ Check Here if No Discharge

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
			TO		

NOTE: Read Instructions before completing this form

PARAMETER	SAMPLE MEASUREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE			
		VALUE	UNITS	VALUE	UNITS	VALUE	UNITS						
pH	SAMPLE MEASUREMENT	*****			*****								
	PERMIT REQUIREMENT	*****			*****	Report Daily Max	S U		1/year	Grab			
CBOD5	SAMPLE MEASUREMENT	*****			*****								
	PERMIT REQUIREMENT	*****			*****	Report Daily Max	mg/L		1/year	Grab			
Chemical Oxygen Demand	SAMPLE MEASUREMENT	*****			*****								
	PERMIT REQUIREMENT	*****			*****	Report Daily Max	mg/L		1/year	Grab			
Total Suspended Solids	SAMPLE MEASUREMENT	*****			*****								
	PERMIT REQUIREMENT	*****			*****	Report Daily Max	mg/L		1/year	Grab			
Oil and Grease	SAMPLE MEASUREMENT	*****			*****								
	PERMIT REQUIREMENT	*****			*****	Report Daily Max	mg/L		1/year	Grab			
Fecal Coliform	SAMPLE MEASUREMENT	*****			*****								
	PERMIT REQUIREMENT	*****			*****	Report Daily Max	CFU/100 ml		1/year	Grab			
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT	*****			*****								
	PERMIT REQUIREMENT	*****			*****	Report Daily Max	mg/L		1/year	Grab			
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT						TELEPHONE		DATE			
TYPED OR PRINTED								AREA CODE		NUMBER	YEAR	MO	DAY
COMMENTS (Report all violations on the "Non-Compliance Reporting Form")													



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY NAME/ADDRESS

NAME Northeast WPCP
CLIENT Philadelphia Water Department
ADDRESS 1101 Market Street, 5th Floor
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PA0026689
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Reporting Frequency: Annually
DMR Effective From: Permit Effective Date
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Permit Expires:
Permit Application Due:

Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER	SAMPLE MEASUREMENT PERMIT	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE				
		VALUE	UNITS	VALUE	UNITS	VALUE	UNITS							
Total Phosphorus	SAMPLE MEASUREMENT	*****		*****		*****								
	PERMIT REQUIREMENT	*****		*****		*****		1/year	Grab					
	SAMPLE MEASUREMENT													
	PERMIT REQUIREMENT													
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NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT								TELEPHONE	DATE			
TYPED OR PRINTED										AREA CODE	NUMBER	YEAR	MO	DAY
COMMENTS (Report all violations on the "Non-Compliance Reporting Form")														



INSTRUCTIONS FOR COMPLETING DISCHARGE MONITORING REPORTS (DMRs)

General

One or more Discharge Monitoring Reports (DMRs) are attached to your permit for reporting the results of self-monitoring activities as required by your permit. You should make copies of the DMRs for your ongoing use, unless you elect to participate in the Department of Environmental Protection's (DEP's) electronic DMR (eDMR) program (see www.dep.state.pa.us/edmr).

- Reporting frequencies will vary depending on the monitoring frequencies listed in your permit, and are generally monthly, quarterly semi-annually and annually.
- Your reports must be received by DEP on the 28th day of the month following the end of the reporting period.
- Your permit may require submission of DMRs to other agencies, including the U.S. Environmental Protection Agency (EPA).
- If you receive DMRs in the mail from EPA, please discontinue use of DMR Form No. 3800-FM-BPNPSM0462 and begin using EPA's DMRs.
- DMRs will generally include pre-populated information for permittee name and address, facility location, permit number, outfall number, permit expiration date, parameter names, and permit requirements. If you identify any errors on a DMR issued by DEP, please contact the DEP regional office that issued your permit. If you identify any errors on a DMR issued by EPA, please contact DEP's Central Office at 717-787-6744. **DO NOT make changes to DMRs issued to you.**
- You may use computer-generated replicas of Form No. 3800-FM-BPNPSM0462 or of EPA's DMR if you receive prior approval from DEP and EPA. **DEP reserves the right to instruct you to discontinue the submission of computer-generated DMRs if the permit requirements you entered on the form are inaccurate.**

Instructions

1. Enter statistical results into each blank field below the "VALUE" column headers. Results must be reported in the same units shown on the DMR.
2. Sum the total number of excursions or exceedances of permit limits across the row for each parameter and enter the value into the "NO. EX" field. For example, if the permit contains limits of 6.0 S.U. (Minimum) and 9.0 S.U. (Maximum) for pH, and the Minimum and Maximum results are 5.9 S.U. and 9.1 S.U., respectively, enter "2" into the "NO. EX" field.
3. Report the actual sampling frequency and sample type utilized during the reporting period in the fields corresponding to "Frequency of Analysis" and "Sample Type", respectively.
4. Type the name of the principal executive officer (or an authorized agent designated by a principal executive officer) who is taking responsibility for the report, sign the report (should be in ink), enter the telephone number of the responsible individual, and record the date that the report was signed. Mail only original, signed copies of DMRs.
5. In the Comments section at the bottom of the DMR, you may write a brief summary of violations in this section; however, DEP requests that all violations during the monitoring period be reported in more detail on DEP's **Non-Compliance Reporting Form** (3800-FM-BPNPSM0440) and be submitted as an attachment to the DMR. Other uses of the Comments Section include explanations of attachments to the DMR, explanations for the unavailability of data, and brief summaries of issues that have affected operations or effluent quality during the monitoring period. Always consider attaching a letter or separate document to explain your situation in more detail.

No Discharge or No Data Available

If there was no discharge at all from an outfall during the monitoring period, check the "No Discharge" box on the top of the DMR. Complete the information above and below the table and mail the DMR to the appropriate agencies. Be sure to sign and date the DMR.

If there was no discharge of a specific parameter (e.g., if a chlorine limit is in the permit but chlorine was not used for disinfection during the entire reporting period), or if data are not available for a specific parameter for the entire reporting period, do not leave the DMR blank. Instead, report one of the following No Data Indicator (NODI) codes that apply to your situation in the appropriate value field, and **provide an explanation as an attachment to the DMR**:

- A** Use if you are exempted from monitoring the parameter because of a General Permit condition.
- E** Use if all samples or results are not available for the reporting period due to equipment failure or because sample collection was overlooked or samples could not be collected for the parameter.
- GG** Use if your permit requires sample collection and analysis only under certain conditions and those conditions were not met during the reporting period (e.g., report chlorine results only when chlorination system is used).
- FF** Other: use if there is any reason for the absence of data that is not covered by those above.

If you have at least one result for a parameter, the value should be reported and not a NODI code.

Calculations

The following explains how to calculate statistical values that are commonly required by permits:

Monthly Average – For Loading (lbs/day), sum the total of daily loadings and divide by the number of samples during the month. To calculate the daily loading, multiply the daily concentration (mg/l) by the flow (MGD) on the date of sampling and a conversion factor of 8.34. For Concentration, sum the total of daily concentrations and divide by the number of samples.

Weekly Average – For Loading (lbs/day), sum the total of average daily loadings during each week of the reporting period (beginning on a Sunday and ending on a Saturday) and divide by the number of samples during the week. For Concentration, sum the total of daily concentrations each week and divide by the number of samples. Report the maximum weekly average on the DMR.

Maximum Daily ("Daily Max") – Report the maximum concentration or load measured during a 24-hour period during the reporting period; if multiple measurements are taken daily, include all data in the analysis.

Instantaneous Maximum ("IMAX") – Report the maximum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Instantaneous Minimum ("Minimum") – Report the minimum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Total Monthly Load (lbs) – Sum the total of average daily loadings, divide by the number of samples during the month, and multiply by the number of days in the month.

Geometric Mean – Report the average of a set of n sample results given by the n th root of their product. If any result is zero (0), substitute 1 for the calculation. For example, five samples were analyzed with the following results: 20, 300, 400, 500, and 0. The calculation of geometric mean is as follows (note that you will need to use the power function on a calculator):

$$\sqrt[5]{20 \cdot 300 \cdot 400 \cdot 500 \cdot 1} = \sqrt[5]{1,200,000,000} = (1,200,000,000)^{1/5} = 65$$

Non-Detect Data

Conventional and Toxic Parameters

For calculating average values of data sets in which there are some "detections" (results at or above the laboratory reporting limit) and some "non-detect" data (results reported below the laboratory reporting limit), use the reporting limit for non-detect data. In other words, ignore the less than (<) symbol for statistical calculations and include the < symbol with the statistical result if there is at least one non-detect result in the data set. For example, four samples were analyzed with the following results: < 1.0, 2.0, < 1.0, and 1.0. The average statistical result is < 1.3.

Where the permit includes an effluent limitation for a parameter that is less than the most sensitive detection limit available, and the laboratory reports a value at or below the lowest level specified by the permit, you may use zero (0) in the calculation in lieu of the reporting limit, if the parameter is identified in 25 Pa. Code Chapter 16, Appendix A, Tables 2A and 2B. In general, parameters with limitations that are less than the most sensitive detection limit will be identified in Part C of the permit, if applicable.

Bacteria Parameters

Report all "non-detect" (e.g., < 2) and "too numerous to count" (TNTC) (e.g., > 2,000) results on DMR supplemental forms as reported by the laboratory. Do not report "TNTC" on supplemental forms, but instead report a value qualified with the ">" symbol. Where a data set includes one or more "non-detect" and/or TNTC results, calculate the geometric mean by ignoring qualifying symbols, but report the value with the symbol. If a data set includes both ">" and "<" qualifiers, the ">" qualifier takes precedence for reporting. For all "non-detect" values, specify in the Comments section of the DMR the maximum volume filtered at the laboratory.

Example 1 – For results are determined, < 2, 10, 20, and 30. The geometric mean should be reported as $< (2 \cdot 10 \cdot 20 \cdot 30)^{0.25} = < 10$. Specify the maximum volume filtered for the < 2 result in the DMR Comments.

Example 2 – Three results are determined, < 2, 1,000, and > 2,000. The geometric mean should be reported as $> (2 \cdot 1,000 \cdot 2,000)^{0.333} = > 158$.

Rounding and Precision

Statistical values reported on the DMR should be rounded to the same number of decimal places as the limit for the parameter as set forth in the permit. If the permit does not contain a limit but requests monitoring only, statistical values for concentration results should be rounded to the maximum number of decimal places in the data set as reported by the laboratory or the instrument used for analysis. If mass loads must be reported and there is no limit, round statistical values to the nearest whole number, unless the calculated number is less than one, in which case the value should be rounded to one significant figure (e.g., 0.1, 0.05, etc.). If the number you are rounding is followed by 5, 6, 7, 8, or 9, round the number up, otherwise round down.

The documents "Discharge Monitoring Reports Overview and Summary" (3800-BK-DEP3047) and "Management of Non-Detect Results for Discharge Monitoring Reports" (3800-FS-DEP4262) contain more information and are incorporated by reference. These documents are available on DEP's website.

Supplemental Form Inventory

The following supplemental forms (indicated in the check box column) are attached to this permit and must be completed and submitted to DEP in accordance with the permit and the supplemental form instructions. If the eDMR system is used to submit DMR reports, the spreadsheet versions of these supplemental forms, where applicable, should be used and attached to the eDMR submissions. A link to DEP's supplemental form website is available when logging into the eDMR system.

Check Box	Supplemental Form Name and No.
<input checked="" type="checkbox"/>	Daily Effluent Monitoring (3800-FM-BPNPSM0435)
<input checked="" type="checkbox"/>	Influent & Process Control (3800-FM-BPNPSM0436)
<input checked="" type="checkbox"/>	Hauled in Municipal Wastes (3800-FM-BPNPSM0437)
<input checked="" type="checkbox"/>	Sewage Sludge/Biosolids Production and Disposal (3800-FM-BPNPSM0438)
<input type="checkbox"/>	Chemical Additives Usage (3800-FM-BPNPSM0439)
<input checked="" type="checkbox"/>	Non-Compliance Reporting Form (3800-FM-BPNPSM0440)
<input checked="" type="checkbox"/>	CSO Monthly Summary Report (3800-FM-BPNPSM0441)
<input checked="" type="checkbox"/>	CSO Detailed Report (3800-FM-BPNPSM0442)
<input type="checkbox"/>	Groundwater Monitoring Data Report (3800-FM-BPNPSM0443)
<input type="checkbox"/>	Nutrient Monitoring (3800-FM-BPNPSM0444)
<input type="checkbox"/>	Nitrogen Budget (3800-FM-BPNPSM0445)
<input type="checkbox"/>	Phosphorus Budget (3800-FM-BPNPSM0446)
<input type="checkbox"/>	Annual Nutrient Summary (3800-FM-BPNPSM0447)
<input type="checkbox"/>	TMDL Annual Load Summary (3800-FM-BPNPSM0448)
<input type="checkbox"/>	Land Application Systems (3800-FM-BPNPSM0449)
<input checked="" type="checkbox"/>	Hauled in Residual Wastes (3800-FM-BPNPSM0450)
<input type="checkbox"/>	Surface Water Monitoring Data Report (3800-FM-BPNPSM0461)
<input checked="" type="checkbox"/>	Lab Accreditation Form (3800-FM-BPNPSM0189)
<input checked="" type="checkbox"/>	Whole Effluent Toxicity Test Summary Report (3800-FM-BPNPSM0485)
<input checked="" type="checkbox"/>	Storm Water Annual Inspection Form (3800-PM-WSFR0083v)
<input checked="" type="checkbox"/>	Storm Water Additional Information (3800-PM-WSFR0083t)
<input checked="" type="checkbox"/>	Other: Bypass Reporting Form