pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0028380**
Facility Type	**Municipal**	APS ID	**1014866**
Major / Minor	**Major**	Authorization ID	**1311445**

Applicant and Facility Information

Applicant Name	**Tinicum Township**	Facility Name	**Tinicum Township WWTP**
Applicant Address	Memorial Bldg., 629 North Governor Printz Boulevard, Essington, PA 19029	Facility Address	125 Chippewa Street Lester, PA 19029-1612
Applicant Contact	Patrick McCarthy	Facility Contact	Robert Bernauer
Applicant Phone	(610) 521-3530	Facility Phone	(610) 521-9191
Client ID	51570	Site ID	255084
Ch 94 Load Status	Not Overloaded	Municipality	Tinicum Township
Connection Status	No Limitations	County	Delaware
Date Application Received	April 1, 2020	EPA Waived?	No
Date Application Accepted		If No, Reason	Major Facility

Purpose of Application: Permit Renewal.

Summary of Review

The applicant requests renewal of an NPDES permit to discharge treated sewage from the Tinicum Township WWTP to Darby Creek (Tidal). The annual average flow is 1.4 mgd and the hydraulic design capacity is 2.8 mgd. The stormwater is discharging into Long Hook Creek which is a tributary of Darby Creek.

The method of treatment is a two-stage High Rate Trickling Filter. Flows initially go through a Grit Chamber and a Comminutor. Primary settling, primary trickling filter, secondary trickling filter, secondary settling and chlorination are part of the treatment. Chlorine gas is used for disinfection.

Class B sludge is produced and sent to DELCORA for further treatment.
No upgrades are planned over the next five years.
Two wastewater chemicals, Coagulant 1850 and Bisulfite 38-40% are used to precipitate Copper.

According to the operations section the facility is operating well. Most of the times the discharge is in compliance with the permit limits.

There are no industrial users discharging into this facility.
There are no changes in the treatment units, influent quality, stream designation etc. Most of the existing permit limits are recommended to be carried over to the new permit.

Existing influent monitoring for BOD5, CBOD5 and TSS are continued to be in the new permit based on the Chapter 94 requirement and to check the percentage removal requirement.

Current permit has a chlorine limit of 0.65 mg/l (average monthly) and a condition requiring the permittee to conduct a chlorine demand study or dechlorination system installation to meet the TRC technology limit of 0.5 mg/l. DMRs show that

Approve	Deny	Signatures	Date
X		*Sara Abraham* Sara Reji Abraham, E.I.T. / Project Manager	06-29-2020
X		Pravin Patel Pravin C. Patel, P.E. / Environmental Engineer Manager	06/30/2020

Summary of Review

the facility can easily meet the technology limit of 0.5 mg/l. Therefore, the TRC limit is changed to 0.5 mg/l for the new permit.

The DRBC Docket No. D-2014-014 CP-1 approved (June 10, 2015) for this project permits the docket holder monitor CBOD5 as a surrogate for CBOD20 as long as the docket holder continues to meet the loading limit and 89.25 % removal requirement for CBOD5. The current CBOD20 loading and percent removal requirement are eliminated from the permit. CBOD5 loading and 89.25 percent removal requirement are included in the new permit.

The current permit has a Copper limit of 0.045 mg/l (average monthly) which was calculated based on a dilution factor of 4. The dilution factor 4 was carried over historically. During the last permit renewal, questions came up about the validity of the dilution factor used in the calculation. The facility was given the option of conducting a CORMIX study to find the appropriate dilution factor. However, the township decided not to do that since the facility was able to meet the effluent limit for Copper in a consistent manner. Recent DMR data shows the facility is able to achieve the current limit. The current limit is recommended for the new permit.

On December 15, 2003, the U.S. EPA, Regions 2 and 3, adopted a TMDL for PCBs for Zones 2, 3, 4, and 5 of the tidal Delaware River. The WLA for Total PCB loading for this facility is 16.59 ug/day. Based on the past PCB data submitted, the current requirement for continued monitoring and implementation of PCB PMP is included in the new permit.

Act 14 Notifications:

Tinicum Township - January 15, 2020
Delaware County - January 15, 2020

Permit Conditions:

A. No Stormwater Condition
B. Acquire Necessary Property Rights
C. Proper Sludge Disposal
D. Chlorine Optimization
E. Operator Notification
F. TMDL/WLA Data
G. Fecal Coliform Reporting
H. Solids Management
I. WET Requirement
J. Stormwater Outfall Requirement
K. PCB PMP Implementation

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	1.4
Latitude	39º 52' 37.23"	Longitude	-75º 17' 52.53"
Quad Name	Lansdowne	Quad Code	1943
Wastewater Description:	Treated Sewage Effluent		
Receiving Waters	Tidal Darby Creek (WWF, MF)	Stream Code	00742
NHD Com ID	25601509	RMI	1.9
Drainage Area	71.3 mi^2		
Q_{7-10} Flow (cfs)	11.7	Q_{7-10} Basis	Previous fact sheet (USGS streamstats)
Watershed No.	3-G	Chapter 93 Class.	WWF, MF
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Delaware River Estuary PCB TMDLs*

*Secondary Waters, Delaware River Estuary Zone 4 is impaired of PCBs.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0
Latitude	39º 52' 28.25"	Longitude	-75º 17' 29.71"
Quad Name	Bridgeport	Quad Code	2043
Wastewater Description:	Stormwater		
Receiving Waters	Long Hook Creek (WWF, MF)	Stream Code	00749
NHD Com ID	25590735	RMI	0.4
Watershed No.	3-G	Chapter 93 Class.	WWF, MF
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		

Treatment Facility Summary

Treatment Facility Name: Tinicum Township WWTP

WQM Permit No.	Issuance Date
2300411	01/08/2001

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Trickling Filter With Settling	Gas Chlorine	1.4

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
2.8	2100	Not Overloaded	Anaerobic Digestion	Other WWTP

Compliance History

DMR Data for Outfall 001 (from May 1, 2019 to April 30, 2020)

Parameter	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19
Flow (MGD) Average Monthly	1.177	1.047	1.193	1.153	1.191	1.005	0.976	0.925	1.005	1.311	1.293	1.29
Flow (MGD) Daily Maximum	1.64	1.419	1.413	2.307	1.531	1.133	1.61	1.017	1.214	1.92	2.138	2.092
pH (S.U.) Instantaneous Minimum	6.0	6.64	6.84	6.7	6.95	6.97	7.17	7.1	7.0	7.09	7.0	7.0
pH (S.U.) Instantaneous Maximum	7.18	7.05	9.93	7.17	7.56	7.4	7.85	7.34	7.3	7.28	7.3	7.29
DO (mg/L) Instantaneous Minimum	8.2	6.67	8.34	8.3	8.05	8.04	7.24	7.17	6.58	7.15	7.39	7.7
DO (mg/L) Average Monthly	8.97	8.91	9.27	9.52	9.47	9.45	8.21	7.71	7.46	7.73	8.16	8.41
TRC (mg/L) Average Monthly	0.003	0.01	0.001	0.01	0.01	0.001	0.001	0.005	0.001	0.02	0.01	0.01
TRC (mg/L) Instantaneous Maximum	0.075	0.05	0.001	0.01	0.01	0.001	0.001	0.11	0.001	0.48	0.01	0.01
CBOD5 (lbs/day) Average Monthly	28	41	< 51	44	43	< 24	< 16	< 20	< 17	< 23	< 23	< 40
CBOD5 (lbs/day) Raw Sewage Influent Average Monthly	1118	1194	1268	1186	42	1384	1371	1401	1280	1113	1482	1258
CBOD5 (lbs/day) Weekly Average	31	52	62	48	58	35	< 20	23	< 18	< 28	< 27	52
CBOD5 (mg/L) Average Monthly	3	5	< 5	5	4	< 3	< 2	< 3	< 2	< 2	< 2	< 4
CBOD5 (mg/L) Raw Sewage Influent Average Monthly	111.8	138.9	128	135.2	4	171	175	184	153	105.1	134	118.7
CBOD5 (mg/L) Weekly Average	3	7	6	6	5	4	< 2	3	2	< 2.3	3	6

BOD5 (lbs/day) Raw Sewage Influent Average Monthly	1297	1310	1365	1389	42	1429	1427	1247	1365	83.3	1589	1390
BOD5 (mg/L) Raw Sewage Influent Average Monthly	129.1	151.7	138	156.2	4	176	182	165	161	908	147	131.7
CBOD20 (lbs/day) Average Monthly	56	81	102	89	86	< 47	< 33	< 39	< 34	< 45	< 46	80
CBOD20 % Removal (%) Percent Removal Minimum	95.04	94.96	94.83	92.89	95.73	96.96	98.81	98.01	98.45	96.31	97.87	90.32
TSS (lbs/day) Average Monthly	120	127	160	126	107	< 40	< 33	< 32	< 34	< 48	< 53	< 62
TSS (lbs/day) Raw Sewage Influent Average Monthly	1589	1371	1270	1292	107	1503	1626	1684	1884	287	1692	1564
TSS (lbs/day) Weekly Average	145	147	184	169	133	< 44	< 38	35	< 36	< 54	< 65	103
TSS (mg/L) Average Monthly	12	15	16	14	10	< 5	< 4	< 4	< 4	< 4	< 5	< 5
TSS (mg/L) Raw Sewage Influent Average Monthly	159	158	129	147	10	187	207	222	225	3139	160	144
TSS (mg/L) Weekly Average	15	19	17	17	11	< 5	< 5	5	4	< 5	5	7
Total Dissolved Solids (mg/L) Daily Maximum		9.23			440.7			379.9			604	
Fecal Coliform (CFU/100 ml) Geometric Mean	3	< 3	< 2	< 3	< 7	< 4	< 7	18	23	9	< 11	14
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	26	60	7	77	2300	59	55	140	79	36	176	365
Total Nitrogen (mg/L) Average Monthly	17.6	21.5	16.36	17.13	17	19.5	18.9	17.8	16.6	13.8	15.3	15.9
Ammonia (mg/L) Average Monthly	< 0.05	< 0.13	< 0.11	< 0.2	< 0.12	0.18	< 0.1	< 0.1	< 0.1	< 0.2	< 0.19	< 0.1

Total Phosphorus (mg/L) Average Monthly	0.87	1.23	1.29	1.23	1.14	0.85	2.28	2.88	2.35	1.74	1.97	1.85
Total Copper (mg/L) Average Monthly	0.040	0.040	0.040	0.030	0.030	0.020	0.030	0.040	0.050	0.030	0.040	0.030
Total Copper (mg/L) Daily Maximum	0.050	0.054	0.040	0.040	0.046	0.030	0.071	0.051	0.060	0.038	0.050	0.045
PCBs (Dry Weather) (pg/L) Daily Maximum					466						3190	
PCBs (Wet Weather) (pg/L) Daily Maximum					601						3280	
Chronic WET - Ceriodaphnia Survival (TUc) Daily Maximum					5.56							
Chronic WET - Ceriodaphnia Reproduction (TUc) Daily Maximum					5.56							
Chronic WET - Pimephales Survival (TUc) Daily Maximum					5.56							
Chronic WET - Pimephales Growth (TUc) Daily Maximum					5.56							

DMR Data for Outfall 002 (from May 1, 2019 to April 30, 2020)

Parameter	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19
pH (S.U.) Daily Maximum					6.81							
CBOD5 (mg/L) Daily Maximum					21.6							
COD (mg/L) Daily Maximum					222							
TSS (mg/L) Daily Maximum					540							

Oil and Grease (mg/L) Daily Maximum					< 5.0							
Fecal Coliform (CFU/100 ml) Daily Maximum					108							
TKN (mg/L) Daily Maximum					6.16							
Total Phosphorus (mg/L) Daily Maximum					0.69							
Dissolved Iron (mg/L) Daily Maximum					0.400							

Compliance History

Effluent Violations for Outfall 001, from: June 1, 2019 To: April 30, 2020

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	02/29/20	IMAX	9.93	S.U.	9.0	S.U.
Fecal Coliform	12/31/19	IMAX	2300	CFU/100 ml	1000	CFU/100 ml
Total Copper	08/31/19	Avg Mo	0.050	mg/L	0.045	mg/L

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 1.4
Latitude 39º 52' 30.44" **Longitude** -75º 17' 48.00"
Wastewater Description: Treated Sewage Effluent

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
Total Suspended Solids	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Water Quality-Based Limitations

Parameter	Limit (mg/l)	SBC	Basis
CBOD5	183 lbs/day	Average Monthly	DRBC WLA*
CBOD5	16	Average Monthly	DRBC WLA*
CBOD5 % Removal**	89.25	Minimum	DRBC Docket*
TSS	30	Average Monthly	DRBC Regulation (3.10.4.D)
NH3-N***	3.0 mg/l	Average Monthly	BPJ /BAT
Total Nitrogen	Report	Average Monthly	Data Collection
Total Phosphorus	Report	Average Monthly	Data Collection
Dissolved Oxygen	5.0	Inst. Minimum	BPJ****
TRC	0.5	Average Monthly	Previous Spreadsheet
Fecal Coliform	200/1000	Geometric Mean/Inst.Max.	Cha. 93 & DRBC
pH	6.0 to 9.0 STD units at all times		Cha. 93
TDS	Monitoring	Daily Max	DRBC Docket*

*DRBC Docket No. D-2014-014 CP-1
**CBOD20 is replaced with CBOD5
*** Review of the monitoring results shows this limit is easily achievable. The limit is established to maintain the current treatment quality while DRBC is planning to come up with an ammonia criterion for Estuary.
**** Review of the monitoring results shows this limit is easily achievable. This is consistent with the Chapter 93 minimum criterion for WWF streams.
All other limits are similar to the existing permit limits.

A “Reasonable Potential Analysis” determined that the following are parameters of concern:

Parameter	Maximum Concentration in Application (ug/l)	Most Stringent Criterion (ug/l) (a)	Max. Allowable Concentration using dilution factor (a*6.4)	Comments
Total Dissolved Solids	604000	500000	3200000	Recommend existing monitoring
Total Aluminum	1050	750	4800	Monitoring
Total Copper	71	9.3	59.52	Continue existing limit
Free Available Cyanide	15	5.2	33.28	Monitoring
Total Phenols	17	5	32	*Monitoring
Bis(2-Ethylhexyl) Phthalate	4.15	1.2	7.68	**Monitoring
Chrysene	0.277	0.0038	0.02432	**Monitoring
Dichlorobromomethane	1.1	0.55	3.52	Monitoring

The discharge is into the tidal portion of Darby Creek and a dilution factor is not established based on any studies. Therefore, the following dilution factor is calculated based on the Darby Creek flow.

Q7-10 = 11.7 cfs = 7.56 mgd, Qd = 1.4 mgd

Dilution factor = (7.56+1.4)/1.4 = 6.4

*There are no surface water intakes for public water supply within a 5-mile tidal influence of the discharge and monitoring recommended.

**Not enough data to establish a limit and recommend monitoring to collect more data and reevaluate at the next renewal.

Total Aluminum, Free Available Cyanide, Total Phenols, Bis(2-Ethylhexyl) Phthalate, Chrysene and Dichlorobromomethane are new parameters in the permit.

Anti-Backsliding

N/A

Outfall No. 002 **Design Flow (MGD)** 0
Latitude 39º 52' 29.00" **Longitude** -75º 17' 30.00"
Wastewater Description: Stormwater

The current stormwater parameters pH, CBOD5, COD, TSS, Oil and Grease, Fecal Coliform, Total Kjeldahl Nitrogen, Total Phosphorus and Dissolved Iron are continued in the new permit.

The DMR shows elevated COD and TSS concentrations in the stormwater. The BMP options may need to be reevaluated to lower COD and TSS in the stormwater discharge.

Whole Effluent Toxicity (WET)

For Outfall 001, ☐ **Acute** ☒ **Chronic** WET Testing was completed:

☐ For the permit renewal application (4 tests).
☐ Quarterly throughout the permit term.
☐ Quarterly throughout the permit term and a TIE/TRE was conducted.
☒ Other: annually

The dilution series used for the tests was: 100%, 59%, 18%, 9%, and 5%. The Target Instream Waste Concentration (TIWC) to be used for analysis of the results is 18%.

WET Summary and Evaluation

Facility Name	Tinicum Township WWTP
Permit No.	PA0028380
Design Flow (MGD)	1.4
Q_{7-10} Flow (cfs)	11.7
PMF_a	0.365
PMF_c	1

		Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Species	**Endpoint**	1/13/16	2/27/18	11/6/18	12/17/19
Pimephales	Survival	pass	pass	pass	pass

		Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Species	**Endpoint**	1/13/16	2/27/18	11/6/18	12/17/19
Pimephales	Growth	pass	pass	pass	pass

		Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Species	**Endpoint**	1/13/16	2/27/18	11/5/18	12/16/19
Ceriodaphnia	Survival	pass	pass	pass	pass

		Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Species	**Endpoint**	1/13/16	2/26/18	11/5/18	12/16/19
Ceriodaphnia	Reproduction	pass	pass	pass	pass

Reasonable Potential? NO

Permit Recommendations

Test Type	**Chronic**
TIWC	**16** % Effluent
Dilution Series	**4, 8, 16, 58, 100** % Effluent
Permit Limit	**None**
Permit Limit Species	

*The PMFa and PMFc are taken from the previous fact sheet.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: 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		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	5.0 Inst Min	Report	XXX	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Carbonaceous Biochemical Oxygen Demand (CBOD5)	183	275	XXX	16	24 Wkly Avg	32	2/week	24-Hr Composite
Biochemical Oxygen Demand (BOD5) Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
CBOD5 Minimum % Removal	XXX	XXX	XXX	89.25 Min Mo Avg	XXX	XXX	2/week	Calculation
Total Suspended Solids	350	525	XXX	30	45 Wkly Avg	60	2/week	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000*	2/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/week	Grab

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 Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Ammonia-Nitrogen	35.0	XXX	XXX	3.0	XXX	6.0	2/month	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Aluminum, Total	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	24-Hr Composite
Copper, Total	0.53	1.05 Daily Max	XXX	0.045	0.090	0.113	1/month	24-Hr Composite
Cyanide, Available	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Dichlorobromomethane	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Bis(2-Ethylhexyl) Phthalate	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	24-Hr Composite
Chrysene	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	24-Hr Composite
Phenolics, Total	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PCBs Dry Weather Analysis (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs Wet Weather Analysis (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
Toxicity, Chronic - Ceriodaphnia Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Toxicity, Chronic - Ceriodaphnia Reproduction (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Toxicity, Chronic - Pimephales Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Toxicity, Chronic - Pimephales Growth (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite

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

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 002, Effective Period: 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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
CBOD5	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TKN	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab