pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0031771**
Facility Type	**Municipal**	APS ID	**1024982**
Major / Minor	**Minor**	Authorization ID	**1330068**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Westtown Township**	Facility Name	**Westtown-Chester Creek STP**
Applicant Address	PO Box 79	Facility Address	904 Westtown Road
	Westtown, PA 19395-0079		Westchester, PA 19382
Applicant Contact	Mark Gross	Facility Contact	Mark Gross
Applicant Phone	(610) 692-1930	Facility Phone	(610) 692-1930
Client ID	42451	Site ID	451677
Ch 94 Load Status	Not Overloaded	Municipality	Westtown Township
Connection Status	No Limitations	County	Chester
Date Application Received	October 8, 2020	EPA Waived?	Yes
Date Application Accepted		If No, Reason	
Purpose of Application	Permit Renewal		

Summary of Review

The applicant requests renewal of an NPDES permit to discharge treated sewage from Westtown Chester Creek STP.

The STP consists of a bar screen, grit chambers, equalization tank, aeration tanks, clarifiers, filter unit, UV disinfection and sludge digester. A phosphorus reduction system was added in 2013 in accordance with WQM permit No. 1512416.

Magnesium Hydroxide is used for pH control and Aluminum Chloride Hydroxide Sulfate is used for Phosphorus control at the facility.

Sewage sludge is hauled away to DELCORA for disposal.
Facility is not accepting any hauled-in wastes.

A review of the DMRs shows the discharge is in compliance with existing permit limits most of the times. According to the inspection reports the facility is operating well. There are no changes in the treatment system, influent quality, stream designation etc. There are no significant industrial users contributing to this facility.

Existing permit limits are recommended for the new permit.

Influent monitoring for BOD5, CBOD5 and TSS are continued in the permit based on Chapter 94 requirement and to check compliance with the 85% removal requirement for secondary treatment.

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*,

Approve	Deny	Signatures	Date
X		*Sara Abraham* Sara Reji Abraham, E.I.T. / Project Manager	October 29, 2020
X		*Pravin Patel* Pravin C. Patel, P.E. / Environmental Engineer Manager	10/29/2020

Summary of Review

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.

Act 14 Notifications:

Westtown Township	-	September 11, 2020
Chester County Health Department	-	September 11, 2020

Permit Conditions:

A. No Stormwater
B. Acquire Necessary Property Rights
C. Proper Sludge Disposal
D. Operator Notification
E. TMDL/WLA Analysis
F. Fecal Coliform Reporting
G. Solids Management

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.495
Latitude	39º 57' 1.56"	Longitude	-75º 32' 49.29"
Quad Name	West Chester	Quad Code	1941
Wastewater Description:	Treated Sewage Effluent		
Receiving Waters	East Branch Chester Creek (TSF, MF)	Stream Code	00604
NHD Com ID	25621280	RMI	1.6
Drainage Area	8.63 sq. mi.		
Q_{7-10} Flow (cfs)	1.79	Q_{7-10} Basis	USGS stream stats/previous fact sheet
Elevation (ft)	267		
Watershed No.	3-G	Chapter 93 Class.	TSF, MF
Assessment Status	Impaired		
Cause(s) of Impairment	cause unknown, flow regime modification, habitat alterations, siltation		
Source(s) of Impairment	habitat modification - other than hydromodification, urban runoff/storm sewers		

Treatment Facility Summary

Treatment Facility Name: Westtown-Chester Creek STP

WQM Permit No.	Issuance Date
1512416	12/24/2012
1500407	02/01/2001

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Extended Aeration	Ultraviolet	0.495

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.495	1030	Not Overloaded	Aerobic Digestion	Other WWTP

Compliance History

DMR Data for Outfall 001 (from September 1, 2019 to August 31, 2020)

Parameter	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19
Flow (MGD) Average Monthly	0.305	0.259	0.274	0.321	0.36	0.332	0.342	0.323	0.308	0.276	0.273	0.27
Flow (MGD) Daily Maximum	0.5	0.554	0.366	0.435	0.583	0.467	0.417	0.413	0.41	0.350	0.324	0.21
pH (S.U.) Instantaneous Minimum	6.4	6.1	6.5	6.4	6.5	6.5	6.6	6.4	6.6	6.6	6.1	6.1
pH (S.U.) Instantaneous Maximum	7.5	7.5	7.4	7.2	7.1	7.1	7.2	7.5	7.4	7.2	7.6	7.5
DO (mg/L) Instantaneous Minimum	7.8	7.5	8.3	8.3	9.9	8.0	10.0	8.0	10.3	9.6	7.6	7.9
CBOD5 (lbs/day) Average Monthly	< 6	< 4	< 5	< 5	< 6	< 5	< 6	< 6	< 6	< 5	< 4	< 5
CBOD5 (lbs/day) Raw Sewage Influent Average Monthly	514	300	361	350	447	511	568	462	434	483	476	536
CBOD5 (lbs/day) Weekly Average	< 8	< 4	< 5	< 6	< 10	< 6	< 7	< 7	< 7	< 6	< 5	< 5
CBOD5 (mg/L) Average Monthly	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
CBOD5 (mg/L) Raw Sewage Influent Average Monthly	178	147	159	134	134	194	199	162	154	200	212	222
CBOD5 (mg/L) Weekly Average	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	512	390	290	529	432	493	444	474	375	517	359	171

BOD5 (mg/L) Raw Sewage Influent Average Monthly	168	196	126	198	113	180	160	169	139	236	174	382
TSS (lbs/day) Average Monthly	< 23	10	< 9	< 10	< 13	< 11	< 12	< 11	< 11	< 14	< 17	< 14
TSS (lbs/day) Raw Sewage Influent Average Monthly	596	304	369	344	491	454	441	444	415	592	493	615
TSS (lbs/day) Weekly Average	40	15	10	< 11	< 19	< 12	< 13	< 13	< 13	26	42	17
TSS (mg/L) Average Monthly	< 8	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 6	< 8	< 6
TSS (mg/L) Raw Sewage Influent Average Monthly	197	150	162	132	152	173	155	156	149	250	222	256
TSS (mg/L) Weekly Average	11	7	4	< 4	< 4	< 4	< 4	< 4	< 4	12	19	7
Total Dissolved Solids (mg/L) Daily Maximum			422			460			530			456
Fecal Coliform (CFU/100 ml) Geometric Mean	< 6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 2
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	84	< 1	< 1	3	1	1	1	5	3	< 1	1	8
UV Intensity (µw/cm²) Minimum	3.4	3.3	3.2	3.5	3.3	1.7	1.0	2.3	2.1	2.5	2.8	3.1
Total Nitrogen (mg/L) Average Monthly	< 27.57	< 32.11	< 30.67	< 26.76	< 21.21	< 27.19	< 25.28	< 27.3	< 29.45	< 33.31	< 36.9	< 33.7
Ammonia (lbs/day) Average Monthly	< 0.3	< 0.2	< 0.2	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.2	< 0.2	< 0.2
Ammonia (mg/L) Average Monthly	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total Phosphorus (lbs/day) Average Monthly	1.9	1.8	2.2	2.9	4.3	3.7	4.7	1.2	3.6	2.6	2.2	5.7
Total Phosphorus (mg/L) Average Monthly	0.7	0.9	1.0	1.1	1.3	1.4	1.6	1.5	1.2	1.1	1.0	2.3

Total Copper (mg/L) Average Monthly	0.017	0.015	0.010	0.009	0.010	0.012	0.011	0.013	0.021	0.017	0.016	0.015
Total Copper (mg/L) Daily Maximum	0.017	0.015	0.010	0.009	0.010	0.012	0.011	0.013	0.021	0.017	0.016	0.015

Compliance History

Effluent Violations for Outfall 001, from: October 1, 2019 To: August 31, 2020

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Total Phosphorus	05/31/20	Avg Mo	1.1	mg/L	1.0	mg/L

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .495
Latitude 39º 57' 1.61" **Longitude** -75º 32' 49.26"
Wastewater Description: 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 (5/1 to 10/31)	15	Average Monthly	WQM 7.0 model
CBOD5 (11/1 to 4/30)	25	Average Monthly	Seasonal limit
TSS	30	Average Monthly	DRBC
NH3-N (5/1 to 10/31)	2.5	Average Monthly	WQM 7.0 model
NH3-N (11/1 to 4/30)	7.5	Average Monthly	Seasonal limit
Total Phosphorus (5/1 to 10/31)	1.0	Average Monthly	BPJ
Total Phosphorus (11/1 to 4/30)	2.0	Average Monthly	Seasonal limit
Dissolved Oxygen	5.0	Inst. Min.	WQM 7.0 model
Fecal Coliform (CFU/100ml)	200/1000	Ave.Mon./Inst.Max.	DRBC&Chap. 93
pH	6.0 to 9.0 STD units all the times		Chap. 93
Total Nitrogen	Report	Average Monthly	Data Collection
TDS*	Report	Average Monthly	DRBC
UV intensity	Report	Minimum	Data collection
Total Copper **	0.028	Average Monthly	Existing

*Based on the consistently low TDS concentration , monitoring is recommended to continue.
**Total Copper limit is based on the previous modeling which is protective of the water quality.

All the above limits are existing.

Below is the WQM 7.0 report

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
03G	604	EAST BRANCH CHESTER CREEK	1.600	267.00	8.63	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.100	0.00	1.79	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
Westtown Chest	PA0031771	0.0000	0.0000	0.4950	0.000	25.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	15.00	2.00	0.00	1.50
Dissolved Oxygen	5.00	8.24	0.00	0.00
NH3-N	2.50	0.00	0.00	0.70

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
03G	604	EAST BRANCH CHESTER CREEK	**0.940**	259.00	10.01	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.100	0.00	2.27	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
Westtown School	PA0050652	0.0000	0.0000	0.0300	0.000	25.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	20.00	2.00	0.00	1.50
Dissolved Oxygen	4.00	8.24	0.00	0.00
NH3-N	2.50	0.00	0.00	0.70

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
03G	604	EAST BRANCH CHESTER CREEK	**0.000**	250.00	11.69	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.100	0.00	2.59	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
		0.0000	0.0000	0.0000	0.000	25.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
03G	604	EAST BRANCH CHESTER CREEK

RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
Q7-10 Flow												
1.600	1.79	0.00	1.79	.7658	0.00230	.591	20.85	35.27	0.21	0.195	21.50	7.00
0.940	2.27	0.00	2.27	.8122	0.00181	.612	23.04	37.64	0.22	0.263	21.32	7.00
Q1-10 Flow												
1.600	1.15	0.00	1.15	.7658	0.00230	NA	NA	NA	0.18	0.229	22.00	7.00
0.940	1.45	0.00	1.45	.8122	0.00181	NA	NA	NA	0.18	0.312	21.79	7.00
Q30-10 Flow												
1.600	2.43	0.00	2.43	.7658	0.00230	NA	NA	NA	0.24	0.172	21.20	7.00
0.940	3.09	0.00	3.09	.8122	0.00181	NA	NA	NA	0.25	0.230	21.04	7.00

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	☑
WLA Method	EMPR	Use Inputted W/D Ratio	☐
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	☐
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	☑
D.O. Saturation	90.00%	Use Balanced Technology	☑
D.O. Goal	5		

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
03G	604	EAST BRANCH CHESTER CREEK

NH3-N Acute Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
1.600	Westtown Chest	8.37	5	8.37	5	0	0
0.940	Westtown School	9.57	5	8.5	5	0	0

NH3-N Chronic Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
1.600	Westtown Chest	1.76	2.5	1.76	2.5	0	0
0.940	Westtown School	1.91	2.5	1.78	2.5	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	CBOD5		NH3-N		Dissolved Oxygen		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
1.60	Westtown Chest	15	15	2.5	2.5	5	5	0	0
0.94	Westtown School	20	20	2.5	2.5	4	4	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
03G	604	EAST BRANCH CHESTER CREEK

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
1.600	0.495	21.498	7.000
Reach Width (ft)	Reach Depth (ft)	Reach WDRatio	Reach Velocity (fps)
20.852	0.591	35.272	0.207
Reach CBOD5 (mg/L)	Reach Kc (1/days)	Reach NH3-N (mg/L)	Reach Kn (1/days)
5.90	1.099	0.75	0.786
Reach DO (mg/L)	Reach Kr (1/days)	Kr Equation	Reach DO Goal (mg/L)
7.271	4.686	Tsivoglou	5
Reach Travel Time (days)			
0.195			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.019	5.76	0.74	7.17
0.039	5.63	0.73	7.09
0.058	5.50	0.72	7.02
0.078	5.38	0.70	6.96
0.097	5.26	0.69	6.90
0.117	5.14	0.68	6.86
0.136	5.02	0.67	6.83
0.156	4.91	0.66	6.80
0.175	4.80	0.65	6.78
0.195	4.69	0.64	6.77

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
0.940	0.525	21.318	7.000
Reach Width (ft)	Reach Depth (ft)	Reach WDRatio	Reach Velocity (fps)
23.041	0.612	37.641	0.219
Reach CBOD5 (mg/L)	Reach Kc (1/days)	Reach NH3-N (mg/L)	Reach Kn (1/days)
4.50	0.937	0.57	0.775
Reach DO (mg/L)	Reach Kr (1/days)	Kr Equation	Reach DO Goal (mg/L)
6.957	3.885	Tsivoglou	5
Reach Travel Time (days)			
0.263			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.026	4.38	0.56	6.93
0.053	4.27	0.55	6.92
0.079	4.16	0.54	6.91
0.105	4.05	0.53	6.91
0.131	3.95	0.52	6.91
0.158	3.85	0.51	6.91
0.184	3.75	0.49	6.93
0.210	3.65	0.48	6.94
0.237	3.56	0.48	6.96
0.263	3.46	0.47	6.98

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
03G	604	EAST BRANCH CHESTER CREEK

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
1.600	Westtown Chest	PA0031771	0.000	CBOD5	15		
				NH3-N	2.5	5	
				Dissolved Oxygen			5

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
0.940	Westtown School	PA0050652	0.000	CBOD5	20		
				NH3-N	2.5	5	
				Dissolved Oxygen			4

Anti-Backsliding

N/A

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	Daily Minimum	Average Monthly	Weekly Average	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
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD5 Nov 1 - Apr 30	103	165	XXX	25	40	50	1/week	24-Hr Composite
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
CBOD5 May 1 - Oct 31	62	95	XXX	15	23	30	1/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TSS	124	186	XXX	30	45	60	1/week	24-Hr Composite
Total Dissolved Solids	XXX	Report Daily Max	XXX	XXX	Report Daily Max	XXX	1/quarter	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
UV Intensity (µw/cm²)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Measured

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)	Required
	Average Monthly	Weekly Average	Daily Minimum	Average Monthly	Weekly Average	Instant. Maximum	Measurement Frequency	Sample Type
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
Ammonia Nov 1 - Apr 30	31	XXX	XXX	7.5	XXX	15	1/week	24-Hr Composite
Ammonia May 1 - Oct 31	10	XXX	XXX	2.5	XXX	5	1/week	24-Hr Composite
Total Phosphorus Nov 1 - Apr 30	8.2	XXX	XXX	2.0	XXX	4	1/week	24-Hr Composite
Total Phosphorus May 1 - Oct 31	4.1	XXX	XXX	1.0	XXX	2	1/week	24-Hr Composite
Total Copper	0.12	0.23 Daily Max	XXX	0.028	0.056 Daily Max	0.07	1/month	24-Hr Composite