

Application Type Renewal
Facility Type Municipal
Major / Minor Major

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0027294
APS ID 1109856
Authorization ID 1477541

Applicant and Facility Information

Applicant Name	<u>Bristol Borough Water & Sewer Authority</u>	Facility Name	<u>Bristol Borough WPC Plant</u>
Applicant Address	<u>250 Pond Street</u> <u>Bristol, PA 19007-4937</u>	Facility Address	<u>8 Maple Beach Road</u> <u>Bristol, PA 19007</u>
Applicant Contact	<u>James Dillon</u>	Facility Contact	<u>James Dillon</u>
Applicant Phone	<u>(215) 788-3828</u>	Facility Phone	<u>(215) 788-3828</u>
Client ID	<u>87477</u>	Site ID	<u>263095</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Bristol Borough</u>
Connection Status	<u>No Limitations</u>	County	<u>Bucks</u>
Date Application Received	<u>March 4, 2024</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u></u>	If No, Reason	<u>Major NPDES Permit, TMDL Discharge</u>
Purpose of Application	<u>Permit renewal.</u>		

Summary of Review

The applicant requests renewal of an NPDES permit to discharge 2.7 MGD of treated sewage from the sewage treatment plant into Otter Creek a tidal tributary to the Delaware River Estuary, Zone 2.

The treatment plant consists of grit chamber, bar screen, two (2) primary clarifiers, four (4) first stage trickling filters with rock media, six (6) rotating biological contactors, and two (2) secondary clarifiers, and chlorine disinfection. Following secondary clarification, disinfection occurs via flow paced chlorination equipment. After disinfection, scum dewatering takes place before effluent is discharged into Otter Creek, a tributary to Delaware River Estuary Zone 2. Sludge generated at facility is digested in an anaerobic digester. The plant includes a two-stage sludge anerobic digestion system. The sludge is then removed as a liquid and disposed of at DELCORA WWTP.

The treatment plant serves Bristol Township and Bristol Borough.

Effluent limits for conventional parameters will remain the same in this permit renewal. The permit has CBOD5 limit of 17 mg/l based on FSOD allocation of 640 lbs/day for Bristol Borough WPC Plant by DRBC. Mass limits are calculated based on an annual average flow of 2.7 MGD. The DRBC Docket No. D-1969-066 CP-4 includes load limit for CBOD5 and % removal (88.5 %) requirement for CBOD5 in place of CBOD20 as in the previous permit. The Docket also includes effluent limit of 1000 mg/l for Total Dissolved Solids (TDS). Therefore, this permit renewal will continue with effluent limits for TDS and mass limit for CBOD5 in place of CBOD20. Based on the Discharge Monitoring Reports, the discharge is generally in compliance with all the parameters. We have revised the effluent limit for Ammonia to 20 mg/l from 35 mg/l for this permit renewal. DRBC is working on updating criteria for Ammonia in Delaware River. It appears from the e-DMRs that treatment plant can meet new Ammonia limit. We also have included monitoring requirement for E. Coli for this permit renewal and is consistent with SOP.

Approve	Deny	Signatures	Date
X		<i>Ketan Thaker</i> Ketan Thaker / Project Manager	8/7/2024
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	08/07/2024

Summary of Review

This permit renewal includes quarterly monitoring requirement for PFOA, PFOS, PFBS and HFPO-DA as all these four PFAS related compounds were detected in the effluent which is consistent with SOP. The permittee may discontinue monitoring for PFOA, PFOS, PFBS and HFPO-DA if the results in 4 consecutive monitoring periods indicate non-detect results at or below Quantitation Limit of 4.0 ng/L for PFOA, 3.7 ng/L for PFOS, 3.5 ng/L for PFBS and 6.4 ng/L for HFPO-DA. Influent monitoring requirements for BOD5, CBOD5, and Total Suspended Solids (TSS) will continue for this permit renewal.

Biomonitoring: As per DRBC Toxic waste load allocation program for Delaware River Estuary Zone 2, Final WLA of 5.5 TUc has been allocated to Bristol Borough. The permittee submitted four WET Chronic test reports with renewal application and test results show no toxicity in the effluent. Monitoring requirements for Chronic Toxicity will continue in this permit renewal based on our SOP.

PCB Minimization Plan: On December 15, 2003, the U.S. EPA Regions 2 and 3 adopted a Total Maximum Daily Load (TMDL) for Polychlorinated Biphenyles (PCB) for Zones 2, 3, 4, and 5 for the tidal Delaware River. The TMDL requires that the facilities identified as discharging PCBs to Delaware River prepare and implement a PCB Waste Minimization and Reduction Program also known as Pollution Minimization Plan (PMP).

This facility has been identified as a Group 2 dischargers with a rank within those facilities which contribute 99 percent cumulative PCB loading to the Delaware River. The WLA for Total PCBs for Bristol Borough is 102.68 ug/day. The total effluent loadings for PCBs from 2003 and 2005 sampling results is 36828 ug/day. DRBC and PADEP need a reasonable amount of PCB effluent data to characterize PCB variability. Such data over a period of up to ten years will be used to develop a level of existing effluent quality (EEQ) for PCBs. Based on discussion with DRBC it was decided that the facilities in the top 99 percent cumulative PCBs loading to Delaware River should be required to collect a minimum of four samples (two dry and two wet weather samples) annually. Bristol Borough has implemented PMP for PCBs and has been submitting annual report as required under the permit.

Pretreatment Program: This facility does not have a pretreatment program as there are no significant industrial facilities contributing industrial waste into the treatment plant. There are three industrial users (Acme Uniforms, Urban Outfitters, Inc. and DOW-Union Carbide) which contribute very little amount of sewage and industrial waste into the Bristol Borough sewage treatment plant.

Bristol Borough and Bucks County received written notification on February 29, 2024 regarding application to PADEP.

Following are effluent limits:

PARAMETER	EFFLUENT LIMITS (AV. MO in Mg/l)	BASIS
CBOD5	17	DRBC Docket D-1969-066-CP-4
Ammonia-Nitrogen	20	BPJ
Total Suspended Solids	30	25 Pa Code 92a.47
Dissolved Oxygen	4.0 Minimum	BPJ
Total Residual Chlorine	0.5	25 Pa Code 92a.47-48, TRC Spreadsheet
pH (SU)	6.0 to 9.0 SU	25 Pa Code 92a.47, 95.2
Fecal Coliform (No./100 ml)	200 (Geo Mean)	25 Pa Code 92a.47
Total Phosphorus	Report	25 Pa Code 92a.61
Total Nitrogen	Report	25 Pa Code 92a.61
Total Dissolved Solids	1000	DRBC Docket D-1969-066-CP-4
CBOD5 % Removal	88.5 %	DRBC Docket D-1969-066-CP-4
PCBs (Dry Weather) pg/l	Report	DRBC Docket D-1969-066-CP-4
PCBs (Wet Weather) pg/l	Report	DRBC Docket D-1969-066-CP-4
Chronic Toxicity (TUc)	Report	DRBC Docket D-1969-066-CP-4
E. Coli (No./100 ml)	Report	25 Pa Code 92a.61
PFOA (ng/L)	Report	SOP for PFAS related compounds
PFOS (ng/L)	Report	SOP for PFAS related compounds
PFBS (ng/L)	Report	SOP for PFAS related compounds
HFPO-DA (ng/L)	Report	SOP for PFAS related compounds

Summary of Review

Sludge use and disposal description and location(s): The sludge is removed as liquid and disposed offsite via incineration at the DELCORA WWTP.

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.	<u>001</u>	Design Flow (MGD)	<u>2.7</u>
Latitude	<u>40° 5' 24.45"</u>	Longitude	<u>-74° 51' 26.86"</u>
Quad Name	<u></u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Delaware River (WWF, MF)</u>	Stream Code	<u></u>
NHD Com ID	<u>25474988</u>	RMI	<u></u>
Drainage Area	<u></u>	Yield (cfs/mi ²)	<u></u>
Q ₇₋₁₀ Flow (cfs)	<u></u>	Q ₇₋₁₀ Basis	<u></u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>2-E</u>	Chapter 93 Class.	<u>WWF, MF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>POLYCHLORINATED BIPHENYLS (PCBS)</u>		
Source(s) of Impairment	<u>SOURCE UNKNOWN</u>		
TMDL Status	<u>Final</u>	Name	<u>Delaware River Estuary PCB TMDLs</u>
Background/Ambient Data	Data Source		
pH (SU)	<u></u>	<u></u>	
Temperature (°F)	<u></u>	<u></u>	
Hardness (mg/L)	<u></u>	<u></u>	
Other:	<u></u>	<u></u>	
Nearest Downstream Public Water Supply Intake <u></u>			
PWS Waters	<u></u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u></u>

Treatment Facility Summary				
Treatment Facility Name: Bristol Borough WPC Plant				
WQM Permit No.		Issuance Date		
0918404		1/29/2019		
0915402		5/1/2015		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Trickling Filter with Settling	Gas Chlorine	2.7
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
5.8	5100	Not Overloaded	Anaerobic Digestion	Landfill

Whole Effluent Toxicity (WET)

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

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

The dilution series used for the tests was: 100%, 57%, 14%, 7%, and 4%. The Target Instream Waste Concentration (TIWC) to be used for analysis of the results is: 14.

The test results show all the Chronic Tests passed, there is no reasonable potential. Monitoring requirements for Chronic Toxicity will continue in this permit renewal based on our SOP.

WET Summary and Evaluation

Facility Name	Bristol Borough WPC Plant
Permit No.	PA0027294
Design Flow (MGD)	2.7
Q ₇₋₁₀ Flow (cfs)	25
PMF _a	1
PMF _c	1

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
		11/25/19	11/10/20	2/8/22	12/12/22
Ceriodaphnia	Survival	PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
		11/25/19	11/10/20	2/8/22	12/12/22
Ceriodaphnia	Reproduction	PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
		11/26/19	11/10/20	2/8/22	12/13/22
Pimephales	Growth	PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
		11/26/19	11/10/20	2/8/22	12/13/22
Pimephales	Survival	PASS	PASS	PASS	PASS

Reasonable Potential? NO

Permit Recommendations

Test Type Chronic
 TIWC 14 % Effluent
 Dilution Series 4, 7, 14, 57, 100 % Effluent
 Permit Limit None
 Permit Limit Species

TRC EVALUATION				
Input appropriate values in A3:A9 and D3:D9			Bristol Borough WPC Plant	
2500	= Q stream (cfs)		0.5	= CV Daily
2.7	= Q discharge (MGD)		0.5	= CV Hourly
30	= no. samples		1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream		1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge		15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value		720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)			=Decay Coefficient (K)
Source	Reference	AFC Calculations		Reference CFC Calculations
TRC	1.3.2.iii	WLA afc = 190.950		1.3.2.iii WLA cfc = 186.154
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373		5.1c LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 71.153		5.1d LTA_cfc = 108.221
Source	Effluent Limit Calculations			
PENTOXSD TRG	5.1f	AML MULT = 1.231		BAT/BPJ
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500		
		INST MAX LIMIT (mg/l) = 1.635		
WLA afc	(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))... ...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)			
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)			
LTA_afc	wla_afc*LTAMULT_afc			
WLA_cfc	(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))... ...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)			
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)			
LTA_cfc	wla_cfc*LTAMULT_cfc			
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))			
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)			
INST MAX LIMIT	1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)			

Bristol Borough STP – PA0027294

First Stage Oxygen Demand (FSOD) which is also equal to CBOD20 (as per Ron Rulon of DRBC because it is the first stage of oxygen demand, before the nitrogenous oxygen demand applies), was approved by DRBC for the wastewater discharge from the Bristol Borough STP = 640 lbs/day as an average monthly loading.

Based on the data provided by the Authority we have:

- CBOD20/BOD5 = 1.441.
Ron Rulon also used the following ratio to convert BOD5 to CBOD5:
BOD5/CBOD5 = 1.252.

Using the above two relationships we can say that:

$$\text{CBOD20}/1.25 \text{ CBOD5} = 1.44$$

Using CBOD20 value of 640 lbs/day we have,

$$\begin{aligned} \text{CBOD5} &= 640/1.25 \times 1.4 \\ &= 365.7 \text{ lbs/day} \end{aligned}$$

The concentration limits for CBOD5 based on an annual average flow of 2.7 mgd:

$$\begin{aligned} \text{CBOD5 mass loading} &= 8.34 \times \text{Flow in mgd} \times \text{CBOD5 concentration} \\ 365.7 &= 8.34 \times 2.7 \times \text{CBOD5} \\ \text{Therefore, CBOD5} &= 365.7/8.34 \times 10 \\ &= 16.25 \text{ mg/l} \sim 17 \text{ mg/l} \end{aligned}$$

Compliance History

DMR Data for Outfall 001 (from June 1, 2023 to May 31, 2024)

Parameter	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23
Flow (MGD) Average Monthly	1.409	2.248	2.261	1.747	2.122	1.659	1.167	1.316	1.383	1.262	1.372	1.357
Flow (MGD) Daily Maximum	1.752	3.670	3.353	2.138	2.824	2.554	1.471	1.639	1.859	1.647	1.647	2.022
pH (S.U.) Instantaneous Minimum	6.88	6.40	6.68	6.43	6.36	6.31	6.20	6.20	6.36	6.37	6.42	6.57
pH (S.U.) Instantaneous Maximum	7.34	7.16	7.09	7.03	7.08	6.95	7.14	7.05	6.93	7.05	7.00	7.05
DO (mg/L) Instantaneous Minimum	8.17	8.49	9.18	8.20	8.37	8.26	8.34	7.99	7.50	7.56	7.19	7.62
TRC (mg/L) Average Monthly	0.32	0.39	0.36	0.23	0.40	0.35	0.39	0.29	0.32	0.31	0.26	0.29
TRC (mg/L) Instantaneous Maximum	0.57	0.73	0.46	0.34	0.55	0.50	0.72	0.51	0.58	0.52	0.44	0.40
CBOD5 (lbs/day) Average Monthly	57.6	90.0	81.7	101.4	87.4	71.5	45.6	44.5	35.7	36.8	52.1	46.1
CBOD5 (lbs/day) Raw Sewage Influent Average Monthly	1673.5	2192.9	1754.4	1703.5	1700.5	2197.7	1937.0	2045.7	1826.9	1633.1	2167.5	1687.1
CBOD5 (lbs/day) Weekly Average	65.0	163.9	92.2	122.1	123.5	97.4	64.0	50.3	39.5	41.1	58.8	56.1
CBOD5 (mg/L) Average Monthly	4.9	4.4	4.3	7.1	< 4.8	4.9	4.4	4.0	3.1	3.5	4.3	3.9
CBOD5 (mg/L) Raw Sewage Influent Average Monthly	125.1	102.2	86.4	108.8	88.0	142.9	171.7	166.4	141.3	138.4	156.8	131.9
CBOD5 (mg/L) Weekly Average	5.5	6.0	4.5	8.9	7.5	5.5	5.5	4.5	3.5	4.0	4.5	4.5

**NPDES Permit Fact Sheet
Bristol Borough WPC Plant**

NPDES Permit No. PA0027294

BOD5 (lbs/day) Raw Sewage Influent Average Monthly	1987	2576	2215	2172	2190	2585	2265	2367	2204	1900	2463	1992
BOD5 (mg/L) Raw Sewage Influent Average Monthly	148.6	120.6	108.1	138.1	114.0	167.8	200.4	192.0	170.0	161.4	178.3	155.1
CBOD5 % Removal (%) Percent Removal Minimum Monthly Average	95.35	91.30	94.59	93.50	94.25	94.85	97.44	97.32	96.84	96.40	96.75	95.16
TSS (lbs/day) Average Monthly	61.2	130.2	115.8	144.0	162.0	130.2	44.2	61.1	38.5	56.3	94.1	70.8
TSS (lbs/day) Raw Sewage Influent Average Monthly	3083	3324	1516	2300	3786	3706	2320	2784	3350	3415	4689	3560
TSS (lbs/day) Weekly Average	138.7	167.4	250.6	216.7	228.8	193.5	69.7	101.2	60.4	62.6	145.6	106.7
TSS (mg/L) Average Monthly	5.0	6.8	6.5	10.0	8.8	9.0	4.2	5.4	< 3.3	5.5	7.8	5.8
TSS (mg/L) Raw Sewage Influent Average Monthly	230.2	155.8	72.0	146.0	196.8	241.0	200.2	224.2	255.8	288.4	341.5	292.0
TSS (mg/L) Weekly Average	10.0	8.0	15.5	16.0	14.0	11.5	7.0	9.0	4.5	6.0	12.5	7.0
Total Dissolved Solids (lbs/day) Average Quarterly			4908.8			3117.7			7168.2			2787.2
Total Dissolved Solids (lbs/day) Daily Maximum			4908.8			3117.7			7168.2			2787.2
Total Dissolved Solids (mg/L) Average Quarterly			344.0			264.0			626.0			242.0
Total Dissolved Solids (mg/L) Daily Maximum			344.0			264.0			626.0			242.0
Fecal Coliform (No./100 ml) Geometric Mean	< 2.7	< 2.7	< 2.2	< 3.9	< 1	< 1.3	< 2.9	< 9.7	< 3.9	< 2.4	< 2.3	< 2

**NPDES Permit Fact Sheet
Bristol Borough WPC Plant**

NPDES Permit No. PA0027294

Fecal Coliform (No./100 ml) Instantaneous Maximum	180	24	120	11	6	10	12	140	15	200	8	8
Total Nitrogen (lbs/day) Average Quarterly			27.68			151.87			184.82			175.64
Total Nitrogen (mg/L) Average Quarterly			1.94			12.86			16.14			15.25
Ammonia (lbs/day) Average Monthly	3.7	8.9	10.0	9.9	14.1	12.7	8.5	6.3	4.2	3.9	3.3	5.98
Ammonia (mg/L) Average Monthly	0.31	0.43	0.51	0.68	0.77	0.86	0.82	0.56	0.36	0.38	0.28	0.50
Total Phosphorus (lbs/day) Average Quarterly			20.0			11.9			14.7			24.2
Total Phosphorus (mg/L) Average Quarterly			1.4			1.01			1.28			2.10
PCBs (Dry Weather) (pg/L) Daily Maximum						FF						8660
PCBs (Wet Weather) (pg/L) Daily Maximum						FF						6850
Chronic WET - Ceriodaphnia Survival (TUc) Daily Maximum			1.0			E			GG			GG
Chronic WET - Ceriodaphnia Reproduction (TUc) Daily Maximum			1.0			E			GG			GG
Chronic WET - Pimephales Survival (TUc) Daily Maximum			1.0			E			GG			GG
Chronic WET - Pimephales Growth (TUc) Daily Maximum			1.0			E			GG			GG

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" (386-0400-001), 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 Monthly Average	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	366	549	XXX	17	26 Wkly Avg	34	2/week	24-Hr Composite
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
CBOD5 % Removal (%) Percent Removal	XXX	XXX	88.50	XXX	XXX	XXX	2/week	24-Hr Composite
TSS	676	1013	XXX	30	45 Wkly Avg	60	2/week	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Dissolved Solids	Report Avg Qrtly	Report Daily Max	XXX	1000.0 Avg Qrtly	2000.0	2500	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

Outfall001 , 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 Monthly Average	Average Monthly	Daily Maximum	Instant. Maximum		
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
Total Nitrogen	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Ammonia	450	XXX	XXX	20.0	XXX	40	2/week	24-Hr Composite
Total Phosphorus	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
PCBs (Dry Weather) (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PCBs (Wet Weather) (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	24-Hr Composite
PFOA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFOS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFBS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
HFPO-DA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Chronic WET - Ceriodaphnia Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Chronic WET - Ceriodaphnia Reproduction (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Chronic WET - Pimephales Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Chronic WET - Pimephales Growth (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite

