

Application Type Renewal  
Facility Type Municipal  
Major / Minor Major

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0028428  
APS ID 1067883  
Authorization ID 1403944

**Applicant and Facility Information**

Applicant Name	<u>Brockway Area Sewer Authority</u>	Facility Name	<u>Brockway Area WWTP</u>
Applicant Address	<u>501 Main Street</u> <u>Brockway, PA 15824-1326</u>	Facility Address	<u>70 Industrial Park Drive</u> <u>Brockway, PA 15824-1240</u>
Applicant Contact	<u>Laurie Wayne, Manager</u> <u>(lwayne@brockwaytv.com)</u>	Facility Contact	<u>Rick Boleen, WWTP Operator</u> <u>(rboleen@brockwaytv.com)</u>
Applicant Phone	<u>(814) 268-6565</u>	Facility Phone	<u>(814) 265-0830</u>
Client ID	<u>202231</u>	Site ID	<u>263008</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Brockway Borough</u>
Connection Status	<u>No Limitations</u>	County	<u>Jefferson</u>
Date Application Received	<u>July 19, 2022</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u>July 22, 2022</u>	If No, Reason	<u>Major Facility</u>

Purpose of Application Renewal of an NPDES Permit for an existing discharge of treated sanitary wastewater from a Major municipal sewer system.

**Summary of Review**

Act 14 - Proof of Notification was submitted and received.  
A Part II Water Quality Management permit is not required at this time.  
The applicant should be able to meet the limits of this permit, which will protect the uses of the receiving stream.

I. OTHER REQUIREMENTS:

- A. Stormwater into Sewers
- B. Right of Way
- C. Solids Handling
- D. High Flow Management Plan (HFMP)
- E. Hauled in waste restrictions

SPECIAL CONDITIONS:

- II. Solids Management
- III. Whole Effluent Toxicity (WET)

There are no open violations in efacts associated with the subject Client ID (202231) as of 12/27/2023. [CWY 12/27/2023](#)

Approve	Return	Deny	Signatures	Date
X			Stephen A. McCauley Stephen A. McCauley, E.I.T. / Environmental Engineering Specialist	12/27/2023
X			Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	12/27/2023

**Discharge, Receiving Waters and Water Supply Information**

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>1.5</u>
Latitude	<u>41° 15' 13.00"</u>	Longitude	<u>-78° 47' 50.00"</u>
Quad Name	<u>-</u>	Quad Code	<u>-</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Little Toby Creek (CWF)</u>	Stream Code	<u>49666</u>
NHD Com ID	<u>134396185</u>	RMI	<u>10.62</u>
Drainage Area	<u>90.2</u>	Yield (cfs/mi <sup>2</sup> )	<u>0.102</u>
Q <sub>7-10</sub> Flow (cfs)	<u>9.2</u>	Q <sub>7-10</sub> Basis	<u>calculated</u>
Elevation (ft)	<u>1430</u>	Slope (ft/ft)	<u>0.00209</u>
Watershed No.	<u>17-A</u>	Chapter 93 Class.	<u>CWF</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>Metals, pH, Total Suspended Solids (TSS)</u>		
Source(s) of Impairment	<u>Acid Mine Drainage</u>		
TMDL Status	<u>Final (6/9/2009)</u>	Name	<u>Little Toby Creek</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>Pennsylvania American Water Company - Clarion</u>		
PWS Waters	<u>Clarion River</u>	Flow at Intake (cfs)	<u>90.7</u>
PWS RMI	<u>33.3</u>	Distance from Outfall (mi)	<u>66</u>

\* - The receiving stream is impaired, and there is a TMDL for Aluminum, Iron, Manganese, and pH in the Little Toby Creek Watershed. The Brockway Area WWTP discharge concentrations for Total Aluminum, Total Iron, and Total Manganese are far less than the WQ Criteria in the TMDL, and they were modeled (see Attachment 2) with this renewal and found to not require WQBELs. Similar to previous renewals, no sampling or monitoring for Aluminum, Iron, and Manganese will be added.

Sludge use and disposal description and location(s): All sludge is disposed of at the Greentree Landfill.

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.

Narrative: This Fact Sheet details the determination of draft NPDES permit limits for a renewal of an existing discharge of 1.5 MGD of treated sewage from a Municipal STP in Brockway Borough, Jefferson County.

Treatment permitted under Water Quality Management Permit no. 3303403 consists of the following: An influent pump station, screening, a manual bypass bar screen, two aerated stormwater storage basins with a total capacity of 325,000 gallons, two 750,000 gallon oxidation ditches, two 239,848 gallon spiroflo final clarifiers, ultraviolet light disinfection, post aeration, an aerobic digester and a belt filter press.

**1. Streamflow:**

West Branch Clarion River at Wilcox, PA - USGS gage 03028000 (1955-2008):

Q <sub>7-10</sub> :	<u>6.6</u>	cfs	(USGS StreamStats)
Drainage Area:	<u>63</u>	sq. mi.	(USGS StreamStats)
Yieldrate:	<u>0.102</u>	cfs/m	calculated

Little Toby Creek at Outfall 001:

Yieldrate:	<u>0.102</u>	cfs/m	calculated above
Drainage Area:	<u>90.2</u>	sq. mi.	(USGS StreamStats)
% of stream allocated:	<u>100%</u>	Basis:	No nearby discharges
Q <sub>7-10</sub> :	<u>9.2</u>	cfs	calculated

**2. Wasteflow:**

Maximum discharge: 1.5 MGD = 2.3 cfs

Runoff flow period: 24 hours Basis: Runoff flow for municipal STPs

The calculated stream flow (Q<sub>7-10</sub>) is greater than 3 times the permitted discharge flow. In accordance with the SOP, since this is an existing discharge, the treatment requirements in document number 391-2000-014, titled, "Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers", dated April 12, 2008, were not evaluated for this facility.

Flow will be required to be monitored as authorized under Chapter 92a.61, and as recommended in the SOP.

**3. Parameters:**

The following parameters were evaluated: pH, Total Suspended Solids, Fecal Coliform, E. Coli, Total Phosphorus, Total Nitrogen, NH<sub>3</sub>-N, CBOD<sub>5</sub>, Dissolved Oxygen, and Total Residual Chlorine.

a. pH

Between 6.0 and 9.0 at all times

Basis: Application of Chapter 93.7 technology-based limits.

The measurement frequency will remain as 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations" (362-0400-001).

b. Total Suspended Solids

Limits are 30.0 mg/l as a monthly average and 60.0 as an instantaneous maximum.

Basis: Application of Chapter 92a47 technology-based limits.

c. Fecal Coliform

05/01 - 09/30: 200/100ml (monthly average geometric mean)  
1,000/100ml (instantaneous maximum)

10/01 - 04/30: 2,000/100ml (monthly average geometric mean)  
10,000/100ml (instantaneous maximum)

Basis: Application of Chapter 92a47 technology-based limits

d. E. Coli

Monitoring was added for E. Coli at a frequency of 1/month.

Basis: Application of Chapter 92a.61 as recommended by the SOP for flows greater than 1.0 MGD.

e. Total Phosphorus

Chapter 96.5 does not apply. The previous monitoring for Total Phosphorus will be retained in accordance with the SOP, based on Chapter 92a.61. However, per the SOP, the monitoring frequency will be reduced from 2/month to 1/year since the receiving stream is not impaired for nutrients.

f. Total Nitrogen

The previous monitoring for Total Nitrogen will be retained in accordance with the SOP, based on Chapter 92a.61. However, per the SOP, the monitoring frequency will be reduced from 2/month to 1/year since the receiving stream is not impaired for nutrients.

g. Ammonia-Nitrogen (NH<sub>3</sub>-N)

Median discharge pH to be used: 7.0 Standard Units (S.U.)

Basis: eDMR data from previous 12 months

Discharge temperature: 25°C (default value used in the absence of data)

Median stream pH to be used: 7.0 Standard Units (S.U.)

Basis: default value used in the absence of data

Stream Temperature: 20°C (default value used for CWF modeling)

Background NH<sub>3</sub>-N concentration: 0.1 mg/l

Basis: Default value

Calculated NH<sub>3</sub>-N Summer limits: 11.4 mg/l (monthly average)  
22.8 mg/l (instantaneous maximum)

Calculated NH<sub>3</sub>-N Winter limits: 25.0 mg/l (monthly average)  
50.0 mg/l (instantaneous maximum)

Result: WQ modeling resulted in the summer limits above (see Attachment 1). The winter limits are calculated as three times the summer limits, but since the technology-based limits would govern, they will be used. The calculated limits are less restrictive than in the previous permit. Based on eDMR data, the previous limits are attainable so they will be retained.

h. CBOD<sub>5</sub>

Median discharge pH to be used: 7.0 Standard Units (S.U.)

Basis: eDMR data from previous 12 months

Discharge temperature: 25°C (default value used in the absence of data)

Median stream pH to be used: 7.0 Standard Units (S.U.)

Basis: default value used in the absence of data

Stream Temperature: 20°C (default value used for CWF modeling)

Background CBOD<sub>5</sub> concentration: 2.0 mg/l

Basis: Default value

Calculated CBOD<sub>5</sub> limits: 25.0 mg/l (monthly average)  
50.0 mg/l (instantaneous maximum)

Result: WQ modeling resulted in the summer limits above (see Attachment 1). The calculated limits are the same as the previous permit and will be retained.

i. Influent Total Suspended Solids and BOD<sub>5</sub>

Monitoring for these two parameters will be retained as recommended in the SOP for POTWs, as authorized under Chapter 92a.61.

j. Dissolved Oxygen (DO)

The technology-based minimum of 4.0 mg/l is recommended by the WQ Model (see Attachment 1) and the SOP based on Chapter 93.7, under the authority of Chapter 92a.61. This is the same as the previous permit and will be retained.

The measurement frequency will remain as 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations" (362-0400-001).

k. Disinfection

Ultraviolet (UV) light monitoring

TRC limits: \_\_\_\_\_ mg/l (monthly average)  
\_\_\_\_\_ mg/l (instantaneous maximum)

Basis: Ultraviolet (UV) light intensity (µw/cm<sup>2</sup>) reporting will be retained with this renewal.

The measurement frequency was previously set to 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations" (362-0400-001), which will be retained.

**4. Reasonable Potential Analysis for Receiving Stream:**

A Reasonable Potential Analysis was performed in accordance with State practices for Outfall 001 using the Department's Toxics Management Spreadsheet (see Attachment 2).

Result: The discharge concentrations for the following parameters were found to be greater than 10% of the calculated WQBELs:

Parameter	Discharge Conc. (µg/l)	WQBEL (µg/l)	%WQBEL
Total Copper	19	34.5	>50%
Total Zinc	31.9	286	>10%
1,1,2,2-Tetrachloroethane	1.4	4.65	>25%
Vinyl Chloride	<1	0.47	>50%
Aldrin	<0.1	0.00002	>50%
alpha-BHC	<0.1	0.009	>50%
beta-BHC	<0.1	0.19	>50%
Chlordane	<2.53	0.007	>50%
4,4-DDT	<0.1	0.0007	>50%
4,4-DDE	<0.1	0.0005	>50%
4,4-DDD	<0.1	0.002	>50%
Dieldrin	<0.1	0.00002	>50%
alpha-Endosulfan	<0.1	0.28	>25%
beta-Endosulfan	<0.1	0.28	>25%
Endrin	<0.1	0.15	>50%
Heptachlor	<0.1	0.0001	>50%
Heptachlor Epoxide	<0.1	0.0007	>50%
Toxaphene	<2.53	0.001	>50%

Per the SOP, a Pre-Draft Survey Letter (see Attachment 3) was emailed on April 11, 2023 to provide the Permittee a chance to sample for the parameters above at the target QLs to determine if they are indeed present since the QLs used were higher than the target QLs in the application.

The sample results were received on July 6, 2023 (see Attachment 3). The Department's Toxics Management Spreadsheet was revised (see Attachment 4) and the discharge concentrations for the following parameters were found to be greater than 10% of the calculated WQBELs:

Parameter	Discharge Conc. (µg/l)	WQBEL (µg/l)	%WQBEL
Total Copper	19	24.8	>50%
Total Zinc	31.9	212	>10%
1,1,2,2-Tetrachloroethane	1.4	4.65	>25%

Per the SOP, since the discharge concentrations for Total Copper were greater than 50% of the calculated WQBEL, a new limit will be added. Since the limit is attainable, no compliance schedule will be added.

Per the SOP, since the discharge concentration for 1,1,2,2-Tetrachloroethane was greater than 25% of the calculated WQBEL, 1/quarter monitoring will be set with the Draft NPDES Permit.

Also, per the SOP, since the discharge concentrations for Total Zinc were greater than 10% of the calculated WQBEL, 1/quarter monitoring will be added to this renewal.

**5. Reasonable Potential for Downstream Public Water Supply (PWS):**

The Department's Toxics Management Spreadsheet does not calculate limits for parameters that are based on PWS criteria (TDS, Chloride, Bromide, and Sulfate).

Nearest Downstream potable water supply (PWS): Pennsylvania American Water Company - Clarion

Distance downstream from the point of discharge: 66.0 miles

Parameter	PWS Criteria (mg/l)	Discharge Maximum (mg/l)
TDS	500	294
Chloride	250	66.8
Bromide	1.0	< 0.1
Sulfate	250	30.8

Result: Since none of the parameters are discharged at a concentration greater than the criteria at the PWS, no limits or monitoring are necessary as significant dilution is available.

**6. Flow Information:**

The Brockway Area WWTP receives 53% of its flow from the Brockway Borough in Jefferson County, 32% from Snyder Township in Jefferson County, and 15% from Horton Township in Elk County.

All three municipalities are 100% separate sewer systems.

**7. Antibacksliding:**

Since all the permit limits in this renewal are the same or more restrictive than the previous NPDES Permit, anti-backsliding is not applicable.

**8. Attachment List:**

- Attachment 1 - WQ Modeling Printouts
- Attachment 2 - Toxics Management Spreadsheet (Pre-Survey)
- Attachment 3 - Pre-Draft Survey Letter and Response
- Attachment 4 - Toxics Management Spreadsheet (Post-Survey)
- Attachment 5 - Wet Analysis Spreadsheet

(The Attachments above can be found at the end of this document)

**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:

The dilution series used for the tests was: **5%, 10%, 20%, 60%, and 100%**  
The Target Instream Waste Concentration (TIWC) to be used for analysis of the results was: **20%**

**Summary of Four Most Recent Test Results (see Attachment 5 - WET Analysis Spreadsheet)**

Is there reasonable potential for an excursion above water quality standards based on the results of these tests?  
(NOTE – In general, reasonable potential is determined anytime there is at least one test failure in the previous four tests).

**YES**  **NO**

**Evaluation of Test Type, IWC and Dilution Series for Renewed Permit**

Acute Partial Mix Factor (PMFa): **0.004**                      Chronic Partial Mix Factor (PMFc): **0.03**

**1. Determine IWC – Acute (IWCa):**

$$(Q_d \times 1.547) / ((Q_{7-10} \times PMFa) + (Q_d \times 1.547))$$
$$[(1.5 \text{ MGD} \times 1.547) / ((9.2 \text{ cfs} \times 0.004) + (1.5 \text{ MGD} \times 1.547))] \times 100 = \mathbf{98\%}$$

Is IWCa < 1%?  **YES**  **NO**

**Type of Test for Permit Renewal:** Chronic

**2a. Determine Target IWCa (If Acute Tests Required)**

TIWCa = N/A

**2b. Determine Target IWCC (If Chronic Tests Required)**

$$(Q_d \times 1.547) / (Q_{7-10} \times PMFc) + (Q_d \times 1.547)$$
$$[(1.5 \text{ MGD} \times 1.547) / ((9.2 \text{ cfs} \times 0.03) + (1.5 \text{ MGD} \times 1.547))] \times 100 = \mathbf{89\%}$$

**3. Determine Dilution Series: 22%, 45%, 89%, 95%, and 100%**

**WET Limits**

Has reasonable potential been determined?  **YES**  **NO**

Will WET limits be established in the permit?  **YES**  **NO** - Per Special Condition III.B.2 in the previous NPDES Permit, the WETT limits were replaced by monitoring during the previous permit. Since no reasonable potential was calculated with this renewal, no WETT monitoring or limits will be required with this renewal.

If WET limits will be established, identify the species and the limit values for the permit (TU): **N/A**

If WET limits will not be established, but reasonable potential was determined, indicate the rationale for not establishing WET limits: **N/A**



Compliance History

DMR Data for Outfall 001 (from November 1, 2022 to October 31, 2023)

Parameter	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23	DEC-22	NOV-22
Flow (MGD) Average Monthly	0.15	0.158	0.172	0.143	0.101	0.157	0.209	0.299	0.184	0.384	0.201	0.152
Flow (MGD) Daily Maximum	0.543	0.856	0.555	0.373	0.203	0.381	0.704	0.669	0.332	1.241	0.701	0.577
pH (S.U.) Instantaneous Minimum	7.14	7.17	7.13	7.05	6.98	6.74	6.71	6.57	6.67	6.58	6.53	6.74
pH (S.U.) Instantaneous Maximum	7.64	7.69	7.73	7.60	7.54	7.43	7.26	7.1	7.15	7.26	7.28	7.41
DO (mg/L) Instantaneous Minimum	7.62	7.41	7.74	4.65	5.56	7.84	8.48	8.01	6.14	5.87	5.0	4.74
CBOD5 (lbs/day) Average Monthly	< 2	< 3.0	< 4	< 3	< 2	< 4	< 4	< 7	< 5	< 11	< 4.0	< 3
CBOD5 (lbs/day) Weekly Average	< 3	< 5.0	< 8	4	< 3	< 9	< 6	< 12	< 6	< 24	< 5.0	< 4
CBOD5 (mg/L) Average Monthly	< 3.0	< 3.0	< 3.0	< 3.6	< 3.2	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.1	< 3.0
CBOD5 (mg/L) Weekly Average	< 3.0	< 3.0	< 3.0	< 4.0	< 3.8	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.3	< 3.0
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	99	89	< 111	103	90	121	132	< 179	92	< 151	133	102
BOD5 (mg/L) Raw Sewage Influent Average Monthly	122.5	82.6	< 87.3	108.3	120.3	102.7	92.3	< 67.9	60.4	< 45.3	103	124.5
TSS (lbs/day) Average Monthly	< 3	< 4.0	< 5	< 4	< 4	< 5	< 5	< 8	< 9	< 16	< 4.0	< 3
TSS (lbs/day) Raw Sewage Influent Average Monthly	71	91	100	68	68	90	77	95	66	102	99	79
TSS (lbs/day) Weekly Average	5	< 6.0	8	7	5	< 10	7	< 17	20	< 39	< 5.0	6
TSS (mg/L) Average Monthly	< 4.0	< 4.0	< 3.0	< 4.0	< 5.0	< 3.0	< 4.0	< 3.0	< 5.0	< 4.0	< 3.0	< 4.0
TSS (mg/L) Raw Sewage Influent Average Monthly	91	78	76	68	92	72	56	46	41	27	75	97
TSS (mg/L) Weekly Average	5.0	< 4.0	4.0	7.0	8.0	< 5.0	7.0	4.0	11.0	6.0	< 4.0	6.0

**NPDES Permit Fact Sheet  
Brockway Area WWTP**

**NPDES Permit No. PA0028428**

Fecal Coliform (No./100 ml) Geometric Mean	< 1.0	< 1	< 1	< 3.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1	< 1.0	< 1
Fecal Coliform (No./100 ml) Instantaneous Maximum	1.0	1.0	6	15	9.0	1.0	2.0	< 1.0	1.0	1	1.0	2
UV Intensity ( $\mu\text{w}/\text{cm}^2$ ) Average Monthly	100	96.46	85.98	62.21	60.31	74.97	65.98	100	100	100	100	100
Total Nitrogen (mg/L) Average Monthly	< 1.4	< 1.2	< 2.38	4.13	1.61	< 1.2	< 1.76	5.97	7.34	3.06	6.87	4.64
Ammonia (lbs/day) Average Monthly	< 0.2	< 0.1	< 0.7	3	1	< 0.2	< 0.2	< 0.3	< 0.2	< 0.8	< 0.2	< 0.1
Ammonia (mg/L) Average Monthly	< 0.2	< 0.1	< 0.3	2.8	1.75	< 0.2	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 0.1
Total Phosphorus (mg/L) Average Monthly	3.12	2.41	2.47	2.31	1.78	1.74	1.59	1.44	1.58	1.15	2.48	3.2
Chronic WET - Ceriodaphnia Survival (TUc) Daily Maximum		GG			GG			GG		GG		
Chronic WET - Ceriodaphnia Reproduction (TUc) Daily Maximum		GG			GG			GG		GG		
Chronic WET - Pimephales Survival (TUc) Daily Maximum		GG			GG			GG		GG		
Chronic WET - Pimephales Growth (TUc) Daily Maximum		GG			GG			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” (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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	1/day	Grab
CBOD5	250.0	375.0	XXX	20.0	30.0	40	2/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
TSS	375.0	562.0	XXX	30.0	45.0	60	2/week	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
UV Intensity (µw/cm <sup>2</sup> )	XXX	XXX	XXX	Report	XXX	XXX	1/day	Measured
Total Nitrogen	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	24-Hr Composite
Ammonia Nov 1 - Apr 30	243.0	XXX	XXX	19.5	XXX	39	2/week	24-Hr Composite
Ammonia May 1 - Oct 31	81.0	XXX	XXX	6.5	XXX	13	2/week	24-Hr Composite

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Total Phosphorus	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	24-Hr Composite
Total Copper	0.31 Avg Qrtly	0.77 Daily Max	XXX	0.0248 Avg Qrtly	0.062 Daily Max	XXX	1/quarter	24-Hr Composite
Total Zinc	Report Avg Qrtly	Report Daily Max	XXX	Report Avg Qrtly	Report Daily Max	XXX	1/quarter	24-Hr Composite
1,1,1,2-Tetra-chloroethane	Report Avg Qrtly	Report Daily Max	XXX	Report Avg Qrtly	Report Daily Max	XXX	1/quarter	24-Hr Composite

Compliance Sampling Location: at Outfall 001, after ultraviolet (UV) light disinfection.

Flow is monitor only based on Chapter 92a.61. The limits for pH and Dissolved Oxygen are technology-based on Chapter 93.7. The limits for CBOD<sub>5</sub>, Total Suspended Solids, and Fecal Coliforms are technology-based on Chapter 92a.47. Monitoring for influent BOD<sub>5</sub> and influent Total Suspended Solids is based on Chapter 92a.61. Monitoring for UV Intensity, Total Nitrogen, and Total Phosphorus is based on Chapter 92a.61. The limits for Ammonia-Nitrogen are water quality-based on Chapter 93.7. The limits for Total Copper are water quality-based on Chapter 16. Monitoring for Total Zinc and 1,1,1,2-Tetra-chloroethane is based on Chapter 92a.61.