

Application Type Renewal  
 Facility Type Municipal  
 Major / Minor Major

**NPDES PERMIT FACT SHEET  
 INDIVIDUAL SEWAGE**

Application No. PA0021857  
 APS ID 955278  
 Authorization ID 1206923

**Applicant and Facility Information**

Applicant Name	<u>Souderton Borough</u>	Facility Name	<u>Souderton Borough STP</u>
Applicant Address	<u>31 W Summit Street</u> <u>Souderton, PA 18964-1612</u>	Facility Address	<u>174 Cowpath Road</u> <u>Souderton, PA 18964-2007</u>
Applicant Contact	<u>P. Coll</u>	Facility Contact	<u>P Coll</u>
Applicant Phone	<u>(215) 723-4371</u>	Facility Phone	<u>(215) 723-4371</u>
Client ID	<u>3685</u>	Site ID	<u>263090</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Franconia Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Montgomery</u>
Date Application Received	<u>November 8, 2017</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u></u>	If No, Reason	<u>Major Facility</u>
Purpose of Application	<u>Permit Renewal.</u>		

**Summary of Review**

This Fact Sheet summarizes the review of Souderton Borough's application for renewal of their NPDES permit for Souderton Borough STP. This is an existing discharge of 2.0 MGD of treated sewage to UNT 01119 to Skippack Creek located in Franconia Township, Montgomery County. The receiving stream is classified for MF, TSF and is listed as impaired due to excessive algae growth and siltation. The nutrient TMDL for Skippack Creek was withdrawn and sewage treatment plants discharging in the watershed are not subject to the Skippack Creek sediment TMDL.

This permit is an NPDES – Major Sewage ( $\geq 1$  and  $< 5$ ) under the Department's Permit Review Procedures. Since this is a NPDES permit renewal, the Department's Permit Decision Policy does not apply.

There is one Significant Industrial User listed in the permit application; Leidy's Inc (Pork Slaughterhouse). The POTW is not required to implement a federal approved pre-treatment program. 88% flow is from Souderton Borough, 11% from Franconia Township, and 1% from Hilltown Township.

The effluent limits developed and included in an NPDES permit may either be technology based, water quality based, applicable effluent standards from PA Code Title 25 regulations, applicable DRBC Water Quality Regulations, relevant planning aspects for this discharge, or a combination of any or all of the above.

Treatment System Summary

Souderton Borough STP consists of a aerated grit removal, extended aeration for BOD<sub>5</sub> removal and nitrification, ferrous sulfate addition for phosphorus removal, final clarification, chlorination, and post aeration. Sludge handling includes aerobic digestion and dewatering by means of a filter press. Before dewatering, polymer is measured and mechanically blended with the liquid biosolids.

- Continued -

Approve	Deny	Signatures	Date
X		Orest A. Kolodij / NPDES Permits Section	November 7, 2018
		Pravin C. Patel, P.E. / Environmental Engineer Manager	

### Summary of Review

The draft permit includes the following modifications to the existing permit.

1. Revised chronic WETT monitoring requirements are included in parts A and Part C of the permit.
2. New influent monitoring requirements for CBOD<sub>5</sub>, BOD<sub>5</sub> and TSS.
3. New effluent monitoring requirements for total hardness, total nitrogen, and TKN.
4. New numerical effluent limits for chlorodibromomethane, dichlorobromomethane, chloroform, and total iron effective three years from the permit effective date. There is also a Part C requirement to conduct a TRE for these pollutants.
5. There is a Part C permit requirement to update the site-specific copper criteria within the next five years.
6. There is a revised list of annual stormwater monitoring parameters in Part A of the permit.

#### Skippack Creek TMDL – Total Phosphorus

EPA withdrew nutrient portion of Skippack TMDL on September 27, 2007. The existing NPDES permit includes seasonal total phosphorus limits of 1.0 mg/l (summer) and 2.0 mg/l (winter). The existing total phosphorus limits will be carried over in the renewed NPDES permit.

#### Sludge/ Biosolids

The sewage sludge or biosolids produced by this facility is currently managed under beneficial use permit PAG080021. The sludge or biosolids is disposed at various mine sites in Schuylkill County.

#### Total Dissolved Solids (TDS), Chloride, Bromide, Sulfates

The maximum reported TDS concentration is 654 mg/l and the daily TDS load is less than 20,000 lbs/day. Therefore, no monitoring for Chloride, Bromide, and Sulfate is required. A 1/quarter monitoring requirement is included in the permit to be consistent with DRBC docket requirements.

Anti-degradation: Not applicable

#### Stormwater Requirements

Per Phase II stormwater regulations, major POTWs with point source discharge to surface waters are generally required to have a stormwater permit. Therefore, stormwater monitoring requirements are included in Parts A and C of the permit.

#### 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</u>
Latitude	<u>40° 17' 40.12"</u>	Longitude	<u>-75° 19' 55.98"</u>
Quad Name	<u>Telford</u>	Quad Code	<u>1643</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Skippack Creek</u>	Stream Code	<u>01119</u>
NHD Com ID	<u>25999040</u>	RMI	<u>0.09</u>
Drainage Area	<u>1.76</u>	Yield (cfs/mi <sup>2</sup> )	<u>0.05</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.0826</u>	Q <sub>7-10</sub> Basis	<u>USGS StreamStat</u>
Elevation (ft)	<u>262</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>3-E</u>	Chapter 93 Class.	<u>TSF, 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>Excessive Algal Growth, Siltation</u>		
Source(s) of Impairment	<u>Small Residential Runoff, Small Residential Runoff</u>		
TMDL Status	<u>Final</u>	Name	<u>Skippack Creek Watershed TMDL</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>Perkiomen Creek</u>		
PWS Waters	<u></u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u></u>

Changes Since Last Permit Issuance:

- RMI was changed to 0.09 miles.
- Q<sub>7-10</sub> at point of discharge was revised to 0.0826-cfs

Comments:

- Excessive Algal Growth, Siltation and nutrient. Nutrient portion of TMDL is withdrawn by EPA on September 26, 2007

Compliance History

DMR Data for Outfall 001 (from October 1, 2017 to September 30, 2018)

Parameter	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17	NOV-17	OCT-17
Flow (MGD) Average Monthly	2.007	1.793	1.433	1.298	1.837	1.539	2.254	2.511	1.309	1.037	1.084	1.117
Flow (MGD) Daily Maximum	2.858	2.516	2.200	1.713	2.824	2.050	2.643	3.581	1.659	1.211	1.207	1.701
pH (S.U.) Instantaneous Minimum	7.0	7.0	6.7	6.8	6.7	6.3	6.7	6.4	6.8	6.9	6.6	6.6
pH (S.U.) Instantaneous Maximum	7.6	8.6	7.6	7.7	7.3	7.3	7.6	7.4	7.5	7.2	7.3	7.0
DO (mg/L) Minimum	6.5	6.4	6.8	6.5	7.7	8.7	6.5	8.9	8.9	8.4	8.1	7.2
DO (mg/L) Average Monthly	7.3	7.3	7.2	7.2	8.5	9.6	9.9	10.1	10.0	9.2	8.7	7.8
TRC (mg/L) Average Monthly	0.007	0.007	0.005	0.006	0.004	0.003	0.005	0.003	0.003	0.006	0.006	0.007
TRC (mg/L) Instantaneous Maximum	0.030	0.023	0.023	0.016	0.014	0.006	0.016	0.006	0.011	0.028	0.022	0.018
CBOD5 (lbs/day) Average Monthly	38.0	28	32.0	30.0	37.0	25.0	36.0	96	25.0	25.0	28.0	18.0
CBOD5 (lbs/day) Weekly Average	73.0	39	46.0	40.0	75.0	30.0	53.0	273	34.0	42.0	36.0	20.0
CBOD5 (mg/L) Average Monthly	2.0	< 2.0	3.0	3.0	3.0	2.0	2.0	4.0	3.0	3.0	3.0	2.0
CBOD5 (mg/L) Weekly Average	2.0	< 2.0	4.0	4.0	4.0	2.0	2.0	9.0	4.0	5.0	4.0	3.0
TSS (lbs/day) Average Monthly	76.2	63.5	56.5	46.7	93.0	50.2	70.7	83.6	43.3	38.9	50.9	33.2
TSS (lbs/day) Weekly Average	145.4	110.5	79.1	57.3	276.5	60.0	106.2	127.9	58.9	47.5	66.8	40.5
TSS (mg/L) Average Monthly	4.0	4.4	4.9	4.9	5.2	4.0	4.0	4.3	3.0	4.9	5.8	4.0
TSS (mg/L) Weekly Average	4.0	6.0	5.8	6.0	9.8	4.0	4.0	5.0	4.0	5.8	6.4	4.3

**NPDES Permit Fact Sheet  
Souderton Borough STP**

**NPDES Permit No. PA0021857**

Fecal Coliform (CFU/100 ml) Geometric Mean	94	86	93	124	57	43	15	59	20	18	98	99
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	> 20000	196	200	900	800	75	77	696	796	71	3600	228
Ammonia (lbs/day) Average Monthly	1.9	1.4	1.1	3.1	10.0	1.3	10.4	3.9	3.8	1.01	2.8	1.1
Ammonia (mg/L) Average Monthly	< 0.10	< 0.10	0.10	0.25	0.88	0.10	0.78	0.20	0.43	0.12	0.24	0.12
Total Phosphorus (lbs/day) Average Monthly	12.2	10.4	9.1	7.4	7.7	7.3	9.0	16.3	6.1	8.5	7.6	6.7
Total Phosphorus (mg/L) Average Monthly	0.71	0.78	0.76	0.73	0.56	0.63	0.55	0.68	0.64	1.03	0.89	0.82
Total Copper (mg/L) Average Monthly	0.019	0.012	0.014	0.014	0.029	0.012	0.010	0.029	0.018	0.021	0.020	0.026
Total Copper (mg/L) Daily Maximum	0.033	0.016	0.018	0.018	0.087	0.019	0.012	0.071	0.024	0.029	0.029	0.036

**Development of Effluent Limitations**

<b>Outfall No.</b> <u>001</u>	<b>Design Flow (MGD)</b> <u>2</u>
<b>Latitude</b> <u>40° 17' 40.14"</u>	<b>Longitude</b> <u>-75° 19' 55.92"</u>
<b>Wastewater Description:</b> <u>Sewage Effluent</u>	

**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 <sub>5</sub>	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	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	200 / 100 ml	Geo Mean	-	DRBC, 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)	1,000 / 100 ml	10% rule	-	DRBC
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)
Total Dissolved Solids	1,000	Average Monthly		DRBC

Comments:

**Water Quality-Based Limitations**

There were no changes to either the influent volume or quality of wastewater. Therefore, there are no proposed changes to the effluent limits for conventional and non-conventional pollutants for BOD<sub>5</sub>, Ammonia-Nitrogen and TSS.

An updated WQM model is attached to this Fact Sheet. Note that since the point of discharge is located only 0.09 miles from the main stem Skippack Creek, the model was run as if the discharge was directly to the main stem of Skippack Creek at river mile 14.05. This was done to ensure a sufficient stream length was modeled to observe the effects of DO lag. The Q<sub>7-10</sub> at river mile 14.05 of Skippack Creek was estimated as 0.0925-cfs. The difference between the Q<sub>7-10</sub> on Skippack Creek is insignificant compared to the Q<sub>7-10</sub> at the point of discharge (which was estimated as 0.0826-cfs). The updated modeling shows that the existing limits are protective of the DO target of 6.0 mg/l and ammonia toxicity.

An updated PENTOXSD model is attached to this Fact Sheet. Based on the Reasonable Potential Analysis the following parameters were modeled: chlorodibromomethane, dichlorobromoethane, chloroform, and total iron were modeled.

The updated PENTOXSD model recommended effluent limits which are included in the draft permit, effected three years from permit issuance date. Part C of the permit includes standard TRE language which includes a three-year compliance schedule to achieve the final effluent limits. A compliance schedule is appropriate because these are considered new water quality based effluent limits (WQBELs). The first three parameters are possibly chlorine byproducts caused by the chlorine disinfection process. The elevated total iron concentration is possibly due to the addition of ferrous sulfate for phosphorus removal.

The WQM and PENTOXSD computer models were run based on the following input assumptions:

Permitted Flow:	2.0 MGD
pH	7.0 s.u.
Discharge Hardness:	164 mg/l
Stream Hardness:	209 mg/l
Temperature	20 C (summer), 5 C (winter)

**Reasonable Potential Analysis**

The pollutants of concern are all addressed in this section and Whole Effluent Toxicity (WET) is addressed later in this Fact Sheet. A toxic screening was performed to determine if there were other pollutants of concern. The permit application indicated that all parameters in pollutant groups 4 and higher were not detected. Below is a summary of the analysis of detected pollutants above reporting limits in pollutant Groups 1 thru 3.

Parameter	Maximum Concentration in Application or DMRs (µg/L)	Most Stringent Criterion (µg/L)	Candidate for PENTOXSD Modeling?	Most Stringent WQBEL (µg/L)	Screening Recommendation
Total Dissolved Solids	654000	500000	No <sup>(1)</sup>	---	Report
Total Antimony	0.5	5.6	No	---	---
Total Arsenic	3	10	No	---	---
Total Barium	47	2400	No	---	---
Total Boron	421	1600	No	---	---
Total Chromium	0.8	N/A	No	---	---
Total Cobalt	0.6	19	No	---	---
Total Copper	28	16.81	No <sup>(2)</sup>	---	Report
Total Cyanide	2	N/A	No	---	---
Dissolved Iron	61	300	No	---	---
Total Iron	1890	1500	Yes <sup>(3)</sup>	1.5	Limit
Total Lead	0.4	5.56	No	---	---
Total Manganese	26	1000	No	---	---
Total Nickel	4	97	No	---	---
Total Zinc	53	218.8	No	---	---
Total Molybdenum	4	N/A	No	---	---
Chlorodibromomethane	0.8	0.4 <sup>(4)</sup>	Yes	0.515	Limit
Chloroform	6.6	5.7	Yes	7.336	Limit
Dichlorobromomethane	2.4	0.55	Yes	0.708	Limit
1,4-Dioxane	0.2	N/A	No	---	---
Toluene	0.7	330	No	---	---

Notes:

(1) Total dissolved solids (TDS) criteria is applied at nearest downstream public water supply. There are no public water supplies located on Skippack Creek. Therefore, 1/quarter monitoring is included in permit to be consistent with DRBC docket.

(2) The permittee submitted an updated Water Effects Ratio (WER) study on May 21, 2015. A final WER of 4.83, applicable to total copper, was determined to be applicable to the WWTP's effluent. Assuming an effluent hardness of 165 mg/L, the WER produces site-specific acute and chronic criteria of 108.2 ug/L (22.4 \* 4.83) and 69.1 ug/L (14.3 \* 4.83) total copper, respectively. Based on site-specific criteria, no reasonable potential was established. The permit includes monitoring for copper and hardness, and a requirement to update the site-specific criteria within the next 5 years.

(3) Total Iron concentration is slightly higher than the criteria. This is possibly due to the addition of iron salts to control phosphorus. Permittee should either reduce dosage of iron salts or investigate usage of other chemicals. If permittee proposed to continue use of iron salts, numerical limits become effective in three years.

(4) The permittee reported trihalomethanes concentrations above criteria. TRE language is included in Part C of permit Numerical effluent limits become effective in three years.

**Whole Effluent Toxicity (WET)**

**Reasonable Potential Analysis**

For Outfall 002, Chronic WET Testing was completed

The dilution series used for the tests was: 100%, 97.8%, 95.6%, 93.5%, and 91.5%. The Target Instream Waste Concentration (TIWC) to be used for analysis of the results is: 97.8%.

**Summary of Most Recent Test Results**

TST Data Analysis

Test Date	<i>Ceriodaphnia</i> Results (Pass/Fail)		<i>Pimephales</i> Results (Pass/Fail)	
	Survival	Reproduction	Survival	Growth
April 2016	Pass	Pass	Pass	Pass
April 2015 (*)	Pass	Pass	Pass	Pass
October 2014	Pass	Pass	Pass	Pass
October 2013	Pass	Pass	Pass	Pass

**Note:** A “passing” result is that in which the replicate data for the TIWC is not statistically significant from the control condition. This is exhibited when the calculated t value (“T-Test Result”) is greater than the critical t value. A “failing” result is exhibited when the calculated t value (“T-Test Result”) is less than the critical t value.

**Comments:** (\*) Ceriodaphnia was retested in June 2015. The Ceriodaphnia test conducted in April 2015 was invalidated by the laboratory.

Based on review of the last four valid WET tests, no reasonable potential was established. Therefore, WET monitoring requirements are included in Parts A and C of the permit.

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

$$IWCc = (Q(\text{discharge}) / Q(\text{discharge}) + (Q(\text{stream}) * PMF)) * 100$$

$$\text{For } Q_d = 2.0\text{-mgd: } IWCc = (2.0 * 1.547) / ((2.0 * 1.547) + (0.0826)) * 100 = 97.4\% \text{ (say 97\%)}$$

Since the dilution ratio of the receiving stream to discharge is less than 100:1, chronic toxicity testing is required.

$$TIWCc = IWCc/1 = 97\%$$

NOTE: See Attachment C of WET SOP for dilution series based on TIWCc.

Dilution Series = 100%, 97%, 73%, 49%, and 24%.



**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: January 1, 2019 through December 31, 2021.**

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	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Total Iron	XXX	XXX	XXX	Report	Report Daily Max	XXX	1/week	24-Hr Composite
Chlorodibromo-methane	XXX	XXX	XXX	Report	XXX	Report	1/week	Grab
Dichlorobromo-methane	XXX	XXX	XXX	Report	XXX	Report	1/week	Grab
Chloroform	XXX	XXX	XXX	Report	XXX	Report	1/week	Grab

**Outfall 001, Effective Period: January 1, 2022 through December 31, 2023.**

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	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Total Iron	XXX	XXX	XXX	1.5	3.0 Daily Max	3.75	1/week	24-Hr Composite
Chlorodibromo-methane	XXX	XXX	XXX	0.0005	XXX	0.0013	1/week	Grab
Dichlorobromo-methane	XXX	XXX	XXX	0.0007	XXX	0.0018	1/week	Grab
Chloroform	XXX	XXX	XXX	0.0073	XXX	0.018	1/week	Grab

**Proposed Effluent Limitations and Monitoring Requirements**

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**Outfall 001, Effective Period: January 1, 2019 through December 31, 2023.**

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	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.012	XXX	0.038	1/day	Grab
CBOD5 Raw Sewage Influent	Report	Report	XXX	Report	Report	XXX	2/week	24-Hr Composite
CBOD5 Nov 1 - Apr 30	417	667	XXX	25	40	50	2/week	24-Hr Composite
CBOD5 May 1 - Oct 31	250	383	XXX	15	23	30	2/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
TSS Raw Sewage Influent	Report	Report	XXX	Report	Report	XXX	2/week	24-Hr Composite
TSS	500	750	XXX	30	45	60	2/week	24-Hr Composite
Total Dissolved Solids	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/week	Grab
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/month	Calculation
Ammonia Nov 1 - Apr 30	60.0	XXX	XXX	3.6	XXX	7.2	2/week	24-Hr Composite

Outfall 001 , Continued (from January 1, 2019 through December 31, 2023)

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		
Ammonia May 1 - Oct 31	30.0	XXX	XXX	1.8	XXX	3.6	2/week	24-Hr Composite
TKN	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Phosphorus Nov 1 - Mar 31	33.0	XXX	XXX	2.0	XXX	4	2/week	24-Hr Composite
Total Phosphorus Apr 1 - Oct 31	16.5	XXX	XXX	1.0	XXX	2	2/week	24-Hr Composite
Total Copper	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Hardness	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Chronic WET - Ceriodaphnia Survival (TUc)	XXX	XXX	XXX	XXX	Report Daily Max	XXX	See Permit	See Permit
Chronic WET - Ceriodaphnia Reproduction (TUc)	XXX	XXX	XXX	XXX	Report Daily Max	XXX	See Permit	See Permit
Chronic WET - Pimephales Survival (TUc)	XXX	XXX	XXX	XXX	Report Daily Max	XXX	See Permit	See Permit
Chronic WET - Pimephales Growth (TUc)	XXX	XXX	XXX	XXX	Report Daily Max	XXX	See Permit	See Permit

Compliance Sampling Location:

Other Comments:

**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: January 1, 2019 through December 31, 2023.**

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	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
CBOD5	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
COD	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
TSS	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
TKN	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
Dissolved Iron	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab

Compliance Sampling Location:

Other Comments: