

Application Type Renewal
Facility Type Non-Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0033448
APS ID 1074502
Authorization ID 1415544

Applicant and Facility Information

Applicant Name	<u>Pennwood Estates MHC LLC</u>	Facility Name	<u>Pennwood Estates MHP</u>
Applicant Address	<u>6810 Frogtown Road</u> <u>Hermitage, PA 16148</u>	Facility Address	<u>6810 Frogtown Road</u> <u>Hermitage, PA 16148</u>
Applicant Contact	<u>Christopher Triantafelow</u>	Facility Contact	<u></u>
Applicant Phone	<u>(724) 981-5390</u>	Facility Phone	<u></u>
Applicant E Mail	<u>Admin@circlegroup/lc</u>	Facility E Mail	<u></u>
Client ID	<u>345450</u>	Site ID	<u>452841</u>
Municipality	<u>Lackawanna Township</u>	County	<u>Mercer</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Connection Status	<u>No Limitations</u>
Date Application Received	<u>October 25, 2022</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>November 8, 2022</u>	If No, Reason	<u></u>
Purpose of Application	<u>NPDES permit renewal</u>		

Summary of Review

No violations on record.

0.05 dry ton sludge sent to Hermitage WPCP

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.

Approve	Deny	Signatures	Date
X		<i>William H. Mentzer</i> William H. Mentzer, P.E. Environmental Engineering Specialist	January 24, 2023
X		Chad W. Yuriscic, P.E. Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.009</u>
Latitude DP	<u>41° 12' 54.58"</u>	Longitude DP	<u>-80° 22' 42.96"</u>
Latitude NHD	<u>41° 12' 54.14"</u>	Longitude NHD	<u>-80° 22' 42.58"</u>
Quad Name	<u>Sharon East</u>	Quad Code	<u>0902</u>
Wastewater Description:		<u>Treated sanitary wastewater</u>	
Receiving Waters	<u>West Branch Little Neshannock Creek</u>	Stream Code	<u>35547</u>
NHD Com ID	<u>130033567</u>	RMI	<u>9.82</u>
Drainage Area	<u>1.59</u>	Yield (cfs/mi ²)	<u>0.03084</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.05</u>	Q ₇₋₁₀ Basis	<u>L Neshannock Creek</u>
Elevation (ft)	<u>1156.62</u>	Slope (ft/ft)	<u>0.01722</u>
Watershed No.	<u>20-A</u>	Chapter 93 Class.	<u>TSF</u>
Existing Use	<u>statewide</u>	Existing Use Qualifier	<u>none</u>
Exceptions to Use	<u>none</u>	Exceptions to Criteria	<u>none</u>
Comments	<u>Node RMI 1.45; Basin Data 17.4 Sq Mile 877.48 ft elevation</u>		
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	_____		
Source(s) of Impairment	_____		
TMDL Status	_____	Name	_____
Background/Ambient Data	Data Source		
pH (SU)	<u>7.5</u>	<u>7.45 (Pine Run 6/28/05) and 7.6 (Yellow Creek 8/24/86)</u>	
Temperature (°F)	_____	_____	
Hardness (mg/L)	_____	_____	
Other:	_____	_____	
Nearest Downstream Public Water Supply Intake	<u>Beaver Falls</u>		
PWS Waters	<u>Beaver River</u>	Flow at Intake (cfs)	<u>NA</u>
PWS RMI	<u>5.39</u>	Distance from Outfall (mi)	<u>35</u>

Changes Since Last Permit Issuance: none

Other Comments: none

Treatment Facility Summary				
Treatment Facility Name: Pennwood Estates MHP				
WQM Permit No.		Issuance Date		
4372415-T2		April 23, 1999		
4372415-T1		July 26, 1994		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary With Ammonia Reduction	Activated Sludge	Hypochlorite	0.009
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.009	25	Not Overloaded		

Changes Since Last Permit Issuance: none

Other Comments:

Treatment is: comminution with bypass screen, 9 000-gallon extended aeration tank, 1 500-gallon settling tank, flow splitter, two 1 500 -gallon dosing tanks, two 400-square foot intermittent open bed sand filters, and tablet chlorination with a 270-gallon contact tank.

Design is for 50 spaces (units), 25 PPD based on 0.5 lb per space per day and 2.6 people per space at 75 gpcd or 180-gallons per space per day.

	Influent		Influent				Effluent				
	Month	Year	MGD	PPD	mg/L	mg/L	#	mg/L	mg/L	mg/L	#
Annual Average Design			Ave	Ave	Mean	Max		Min	Mean	Max	
Annual Average		2019	0.009	25.0							
		2020	0.007								
		2021	0.007								
Highest Monthly Average	January	2018	0.007								
pH								6.5		7.8	387
TRC									04	0.6	383
Fecal Coliform									210	2420	48
CVOD5									7.4	46.7	47
TSS									6.7	29	47
Ammonia-N									1.7	11.1	47
Nitrogen									8.1	17.8	5
Phosphorus									1.1	1.9	5

Compliance History

DMR Data for Outfall 001 (from October 1, 2021 to September 30, 2022)

Parameter	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21
Flow (MGD) Average Monthly	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
pH (S.U.) Daily Minimum	7.0	7.0	7.0	6.9	6.9	6.8	6.7	6.6	6.5	6.6	6.7	6.5
pH (S.U.) Daily Maximum	7.1	7.1	7.2	7.2	7.3	7.2	7.1	7.0	6.9	6.8	6.8	6.9
DO (mg/L) Daily Minimum	4.4	4.4	4.5	4.8	4.8	4.8	4.7	4.3	4.3	4.2	4.4	4.2
TRC (mg/L) Average Monthly	0.5	0.5	0.5	0.4	0.45	0.5	0.5	0.4	0.4	0.4	0.4	0.4
TRC (mg/L) Instant Maximum	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5
CBOD5 (mg/L) Average Monthly	< 12.1	< 4.0	< 2.0	< 7.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.15	< 2.0	5.8	< 12.0
CBOD5 (mg/L) Instant Maximum	18.2	< 6.0	< 2.0	< 12.0	< 2.0	< 2.0	< 2.0	< 2.0	2.29	< 2.0	6.05	12.0
TSS (mg/L) Average Monthly	9.0	< 6.0	5.5	7.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
TSS (mg/L) Instant Maximum	13.0	6.0	6.0	8.0	< 5.0	< 5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	< 5.0
F Coliform (#/100 ml) Geometric Mean	< 1	< 11	< 5.0	< 5.0	< 25	< 2.0	< 3.0	< 11	< 5.0	63	< 2.0	1.0
F Coliform (#/100 ml) Instant Maximum	< 1	115	< 5.0	5.0	637	5.0	5.0	53	< 5.0	196	3.0	1.0
Total Nitrogen (mg/L) Average Quarterly	22.8			11.1			1.18			7.1		
Total Nitrogen (mg/L) Daily Maximum	22.8			11.1			1.18			7.1		
Ammonia (mg/L) Average Monthly	4.5	< 1.93	1.08	< 2.9	< 0.8	< 0.8	< 0.8	< 0.8	< 0.55	0.8	< 0.8	< 0.8
Ammonia (mg/L) Instant Maximum	6.8	3.05	1.4	7.0	< 0.8	< 0.8	< 0.8	< 0.8	< 1.01	0.8	< 0.8	< 0.8
Total Phosphorus (mg/L) Ave Quarterly	2.5			1.9			0.38			1.6		
Total Phosphorus (mg/L) Daily Maximum	2.5			1.9			0.38			1.6		

Summer pH median 7.1 annual pH median 7.0

Compliance History

No violations reported

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>.009</u>
Latitude <u>41° 12' 54.58"</u>	Longitude <u>-80° 22' 42.96"</u>
Wastewater Description: <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 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)
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 (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)
E Coli	report			
DO	4.0	Daily Minimum		BPJ

Comments: E Coli is a new parameter with reporting requirements

Water Quality-Based Limitations

A Sewerage program “Reasonable Potential Analysis” determined the following parameters were candidates for limitations: CBOD₅, TSS, ammonia, DO and pH.

The following limitations were determined through water quality modeling (output files attached):

Parameter		Limit (mg/l)			SBC	Model		
Name	Period	Minimum	Average	Maximum		Minimum	Average	Maximum
CBOD ₅			25.0	50.0			25.0	50.0
TSS			30.0	60.0			30.0	60.0
Ammonia	summer		4.5	9.0			4.79	9.58
	winter		13.0	26.0			14.33	28.66
Nitrogen	report							
Dissolved Oxygen		4.0				4.0		
Fecal Coliform	summer		200#/100ml				200#/100ml	
	winter		2000#/100ml				2000#/100ml	
E. Coli	report							
pH		6.0		9.0		6.0		9.0
TRC			0.5	1.6			0.5	1.6

Comments: DO is technology based with monitoring recommended for nitrogen and e. coli modelling used a 25% safety factor and a 16-hour runoff period to verify the existing requirements

Best Professional Judgment (BPJ) Limitations

Comments: Applies to the DO requirements

Anti-Backsliding

Back sliding is not needed for compliance

1A	B	C	D	E	F	G	H	I	J	K	L	M
	Discharger Site Municipality County NPDES Permit 0.5		Pennwood Estates MHP Pennwood Estates MHP STP Lackawanna Township Mercer PA0033448					Revised		Wednesday, October 12, 2022 Tuesday, November 8, 2022		
2	TRC EVALUATION											
3	Input appropriate values in B4 B8 and E4 E7											
4	0.0490	= Q stream (cfs)								0.5	= CV Daily	
5	0.0090	= Q discharge (MGD)								0.5	= CV Hourly	
6	4	= no. samples								1	= AFC_Partial Mix Factor	
7	0.3	= Chlorine Demand of Stream								1	= CFC_Partial Mix Factor	
8	0	= Chlorine Demand of Discharge								15	= AFC_Criteria Compliance Time (min)	
9		= BAT/BPJ Value								720	= CFC_Criteria Compliance Time (min)	
	0	= % Factor of Safety (FOS)									= Decay Coefficient (K)	
10	Source	Reference	AFC Calculations				Reference	CFC Calculations				
11	TRC	1.3.2.iii	WLA_afc = 1.142				1.3.2.iii	WLA_cfc = 1.106				
12	PENTOXSD TRG	5.1a	LTAMULT_afc = 0.373				5.1c	LTAMULT_cfc = 0.581				
13	PENTOXSD TRG	5.1b	LTA_afc = 0.426				5.1d	LTA_cfc = 0.643				
14	Source	Effluent Limit Calculations										
15	PENTOXSD TRG	5.1f	AML_MULT = 1.720									
16	PENTOXSD TRG	5.1g	J LIMIT (mg/l) = 0.500				BAT/BPJ					
17			K LIMIT (mg/l) = 1.170									
18												
	WLA_afc	$(0.19/e^{-(k \cdot AFC_tc)}) + [(AFC_Yc \cdot Qs \cdot 0.19 / Qd) \cdot e^{-(k \cdot AFC_tc)}] \dots$										
	LTAMULT_afc	$\dots + Xd + (AFC_Yc \cdot Qs \cdot Xs / Qd) \cdot (1 - FOS / 100)$										
	LTA_afc	$EXP((0.5 \cdot LN((cvh^2 + 1)) - 2.326 \cdot LN((cvh^2 + 1)^{0.5})))$										
	WLA_cfc	$(0.11/e^{-(k \cdot CFC_tc)}) + [(CFC_Yc \cdot Qs \cdot 0.11 / Qd) \cdot e^{-(k \cdot CFC_tc)}] \dots$										
	LTAMULT_cfc	$\dots + Xd + (CFC_Yc \cdot Qs \cdot Xs / Qd) \cdot (1 - FOS / 100)$										
	LTA_cfc	$EXP((0.5 \cdot LN((cvd^2 / no_samples + 1)) - 2.326 \cdot LN((cvd^2 / no_samples + 1)^{0.5})))$										
	AML_MULT	$EXP(2.326 \cdot LN((cvd^2 / no_samples + 1)^{0.5}) - 0.5 \cdot LN((cvd^2 / no_samples + 1)))$										
	AVG MON LIMIT	$MIN(BAT_BPJ, MIN(LTA_afc, LTA_cfc) \cdot AML_MULT)$										
	INST MAX LIMIT	$1.5 \cdot ((av_mon_limit \cdot AML_MULT) / LTA_MULT_afc)$										
	$(0.011 / EXP(-k \cdot CFC_tc / 1440)) + ((CFC_Yc \cdot Qs \cdot 0.011) / (1.547 \cdot Qd)) \dots$											
	$\dots - EXP(-k \cdot CFC_tc / 1440)) + Xd + (CFC_Yc \cdot Qs \cdot Xs / 1.547 \cdot Qd) \cdot (1 - FOS / 100)$											
	Stream	Chlorine Required	=	perennial	Chlorine Demand	+	Chlorine Residual					
	Stream	Reach/Node	1	1								
	Stream	Flow	Conditions	perennial								
	Stream	Code		35547								
	Stream	Function										
	Samples			4								
	reach	outfall	RMI	9.82								
	reach	Reach End	RMI	0								
	reach		feet	51849.6								
	drainage		sq miles	1.59								
	TRC	limitation	average	mg/L	0.148							
			maximum	mg/L	0.484							
	elevation		modelled	feet	1156.26							
	elevation		modelled	feet	877.48							
	slope		modelled	foot/foot	0.005							
	low flow		cfs/sq mi		0.031							
	discharge		mgd		0.0090							
	Runoff	Period	hours		24.000							
	BAT should suffice											
	stream	flow		cfs	0.04903							
	stream	flow		MGD	0.031689							
	stream	flow	total	MGD	0.040689							
	stream	chlorine	demand	mg/L	0.3							
	discharge	discharge	demand	mg/L								
	stream	Total Stream/Waste	ratio		4.5							
	BAT	TRC	mean	BAT	0.5							
	BAT	TRC	maximum	BAT	1.6							
			Municipality									

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
20A	35547	WEST BRANCH LITTLE NESHANNO	0.000	877.48	17.40	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.031	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.50	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

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
20A	35547	WEST BRANCH LITTLE NESHANNO	9.820	1156.62	1.59	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.024	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.50	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
Pennwood Estate	PA0033448	0.0014	0.0135	0.0135	0.000	25.00	7.10

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	4.00	8.24	0.00	0.00
NH3-N	25.00	0.10	0.00	0.70

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	<input checked="" type="checkbox"/>
WLA Method	Uniform Treatme	Use Inputted W/D Ratio	<input type="checkbox"/>
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	<input type="checkbox"/>
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	<input checked="" type="checkbox"/>
D.O. Saturation	95.00%	Use Balanced Technology	<input checked="" type="checkbox"/>
D.O. Goal	5		

WQM 7.0 Wasteload Allocations

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>
20A	35547	WEST BRANCH LITTLE NESHANNOCK 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
9.820	Pennwood Estate	NA	50	10.43	22.63	1	55

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
9.820	Pennwood Estate	NA	25	1.44	4.79	1	81

Dissolved Oxygen Allocations

RMI	Discharge Name	<u>CBOD5</u>		<u>NH3-N</u>		<u>Dissolved Oxygen</u>		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
9.82	Pennwood Estate	25	25	4.79	4.79	4	4	0	0

WQM 7.0 D.O.Simulation

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>			
20A	35547	WEST BRANCH LITTLE NESHANNOCK CREEK			
<hr/>					
<u>RMI</u>	<u>Total Discharge Flow (mgd)</u>	<u>Analysis Temperature (°C)</u>		<u>Analysis pH</u>	
9.820	0.014	21.758		7.315	
<u>Reach Width (ft)</u>	<u>Reach Depth (ft)</u>	<u>Reach WDRatio</u>		<u>Reach Velocity (fps)</u>	
4.666	0.324	14.394		0.039	
<u>Reach CBOD5 (mg/L)</u>	<u>Reach Kc (1/days)</u>	<u>Reach NH3-N (mg/L)</u>		<u>Reach Kn (1/days)</u>	
10.09	0.098	1.75		0.801	
<u>Reach DO (mg/L)</u>	<u>Reach Kr (1/days)</u>	<u>Kr Equation</u>		<u>Reach DO Goal (mg/L)</u>	
6.751	20.784	Owens		5	
<u>Reach Travel Time (days)</u>					
15.279					
	Subreach Results				
	TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)	
	1.528	8.58	0.51	8.24	
	3.056	7.30	0.15	8.24	
	4.584	6.21	0.10	8.24	
	6.112	5.28	0.10	8.24	
	7.640	4.49	0.10	8.24	
	9.167	3.82	0.10	8.24	
	10.695	3.25	0.10	8.24	
	12.223	2.76	0.10	8.24	
	13.751	2.35	0.10	8.24	
	15.279	2.00	0.10	8.24	

WQM 7.0 Effluent Limits

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>					
20A	35547	WEST BRANCH LITTLE NESHANNOCK 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)
9.820	Pennwood Estate	PA0033448	0.001	CBOD5	25		
				NH3-N	4.79	9.58	
				Dissolved Oxygen			4

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	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/week	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50.0	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30.0	XXX	60.0	2/month	8-Hr Composite
E Coli	XXX	XXX	XXX	XXX	XXX	Report Annual	1/year	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	Report Avg Qrtly	Report Daily Max	XXX	1/quarter	8-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	13.0	XXX	26.0	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	4.5	XXX	9.0	2/month	8-Hr Composite
Total Phosphorus	XX	XXX	XXX	Report Avg Qrtly	Report Daily Max	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 001 after disinfection