pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0104272**
Facility Type	**Non-Municipal**	APS ID	**1043552**
Major / Minor	**Minor**	Authorization ID	**1362147**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**PA Fish & Boat Commission**	Facility Name	**North East Access & Marina**
Applicant Address	595 East Rolling Ridge Drive	Facility Address	11950 East Lake Road
	Bellefonte, PA 16823		North East, PA 16428
Applicant Contact	Daniel Gahagan, Chief of Engineering (dgahagan@pa.gov)	Facility Contact	Daniel Gahagan, Chief of Engineering (dgahagan@pa.gov)
Applicant Phone	(814) 359-5142	Facility Phone	(814) 359-5142
Client ID	87637	Site ID	237678
Ch 94 Load Status	Not Overloaded	Municipality	North East Township
Connection Status	No Exceptions Allowed	County	Erie
Date Application Received	July 20, 2021	EPA Waived?	Yes
Date Application Accepted	July 21, 2021	If No, Reason	-
Purpose of Application	Renewal of the NPDES Permit for an existing discharge of treated sanitary wastewater from a non-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. Effluent Chlorine Optimization and Minimization
E. Little Assimilative Capacity

SPECIAL CONDITIONS:

II. Solids Management
III. Public Sewerage Connection

There is 1 open violation in efacts associated with the subject Client ID (87637) as of 9/28/2023 (see Attachment 3). *The violation has been resolved and is no longer open as of 10/12/2023 CWY*

The Department has approved an amendment to the Municipality's sewage facilities official plan under Act 537 (Pennsylvania Sewage Facilities Act, the Act of January 24, 1966, P.L. 1535 as amended) in which sewage from the herein approved facilities will be collected via a public sewer system and treated at a publicly owned treatment facility. Upon completion of the proposed sewer, the permittee shall, upon notification from the municipality or DEP, provide for the conveyance of its sewage to the planned facilities, abandon use and decommission the herein approved facilities including the proper disposal of solids, and notify DEP accordingly. The permittee shall adhere to schedules in the approved official plan, amendments to the plan, or other agreements between the permittee and municipality. This permit shall then, upon notice from DEP, terminate and become null and void and shall be relinquished to DEP. 10/12/2023 CWY

Approve	Deny	Signatures	Date
X		Stephen A. McCauley Stephen A. McCauley, E.I.T. / Environmental Engineering Specialist	9/28/2023
X		Chad W. Yurisic Chad W. Yurisic, P.E. / Environmental Engineer Manager	10/13/2023

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.005
Latitude	42º 15' 23.00"	Longitude	-79º 47' 36.00"
Quad Name	-	Quad Code	-
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Lake Erie (CWF, MF)	Stream Code	N/A
NHD Com ID	123924729	RMI	N/A
Drainage Area	0.16	Yield (cfs/mi^2)	0.07 (small stream)
Q_{7-10} Flow (cfs)	0.011	Q_{7-10} Basis	calculated
Elevation (ft)	597	Slope (ft/ft)	0.037878
Watershed No.	15-A	Chapter 93 Class.	CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake		Pennsylvania - Canada International border	
PWS Waters	Lake Erie	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	15.0

Sludge use and disposal description and location(s): All sludge is sent to the Erie Wastewater Treatment Plant, where it is ultimately disposed of at an approved 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 an existing discharge of 0.005 MGD of treated sewage from a non-municipal STP in North East Township, Erie County.

Treatment permitted under WQM Permit No. 2590403 A-1 consists of the following: Septic tanks, an alum feeder, mixer, and settling tank for Phosphorus control, a dosing tank, dual surface sand filters, tablet chlorine disinfection with a contact tank, and sodium bisulfite dechlorination with a 45 gallon contact tank.

1. Streamflow:

Unnamed Tributary to Lake Erie at Outfall 001:

Yieldrate:	0.07	cfsm	assumed based on stream size
Drainage Area:	0.16	sq. mi.	(USGS StreamStats)
% of stream allocated:	100%	Basis:	No nearby discharges
Q_{7-10}:	0.011	cfs	calculated

2. Wasteflow:

Maximum discharge: 0.005 MGD = 0.007 cfs

Runoff flow period: 24 hours Basis: Septic tanks

The calculated stream flow (Q7-10) is less than 3 times the permitted discharge flow. In accordance with the SOP, 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, will not be evaluated with this renewal.

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_3-N, $CBOD_5$, Dissolved Oxygen, and Disinfection.

a. pH

Between 6.0 and 9.0 at all times

Basis: Application of Chapter 93.7 technology-based limits.

The measurement frequency was previously set to 3/week. It will be set 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 based on Chapter 92a47.

Basis: Application of Chapter 92a47 technology-based limits. However, the previous limits based on an older "Dry Stream Guidance" will be retained as they are attainable.

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/year.

Basis: Application of Chapter 92a.61 as recommended by the SOP for flows between 0.002 MGD and 0.05 MGD.

e. Total Phosphorus

The previous limits based on the Lake Erie 1969 International Joint Committee (IJC) agreement will be retained.

f. Total Nitrogen

The previous monitoring for Total Nitrogen will be retained in accordance with the SOP, based on Chapter 92a.61.

g. Ammonia-Nitrogen (NH_3-N)

Median discharge pH to be used: 7.1 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_3-N concentration: 0.1 mg/l

Basis: Default value

Calculated NH_3-N Summer limits: 5.0 mg/l (monthly average)
10.0 mg/l (instantaneous maximum)

Calculated NH_3-N Winter limits: 15.0 mg/l (monthly average)
30.0 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. The calculated limits are less restrictive than in the previous permit. Since the previous limits are attainable, they will be retained.

h. $CBOD_5$

Median discharge pH to be used: 7.1 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 $CBOD_5$ concentration: 2.0 mg/l

Basis: Default value

Calculated $CBOD_5$ limits: 25.0 mg/l (monthly average)
50.0 mg/l (instantaneous maximum)

Result: WQ modeling resulted in the calculated limits above (see Attachment 1). The calculated limits are less restrictive than in the previous permit. Since the previous limits are attainable, they will be retained.

i. 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. The DO limit is the same as the previous permit and will be retained.

The measurement frequency was previously set to 3/week. It will be set 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).

j. Disinfection

☐ Ultraviolet (UV) light

☒ Total Residual Chlorine (TRC) limits: 0.36 mg/l (monthly average)
1.20 mg/l (instantaneous maximum)

Basis: The TRC limits above were calculated at the first point of use at Lake Erie using the Department's TRC Calculation Spreadsheet (see Attachment 2). The calculated limits are more restrictive than in the previous permit. Since the more restrictive limits are attainable, they will be added with this renewal.

The measurement frequency was previously set to 3/week. It will be set 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).

4. Reasonable Potential Analysis for Receiving Stream:

A Reasonable Potential Analysis was not performed in accordance with State practices using the Department's Toxics Management Spreadsheet since no sampling other than sewage-related parameters was performed for this facility with the renewal application.

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 - Canada International border
Distance downstream from the point of discharge: 15.0 miles

Result: No limits or monitoring is necessary as there is significant dilution available.

6. Anti-Backsliding:

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

7. Attachment List:

Attachment 1 - WQ Modeling Printouts

Attachment 2 - TRC_Calc Spreadsheet

Attachment 3 - Open Violations by Client

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

Compliance History

DMR Data for Outfall 001 (from August 1, 2022 to July 31, 2023)

Parameter	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23	DEC-22	NOV-22	OCT-22	SEP-22	AUG-22
Flow (MGD) Average Monthly	0.001	0.0007	0.0007	0.0004	0.0006	0.0009	0.0008	0.0009	0.0009	0.0008	0.0005	0.0007
Flow (MGD) Daily Maximum	0.0011	0.0008	0.008	0.0005	0.0007	0.001	0.001	0.001	0.0011	0.0011	0.0008	0.001
pH (S.U.) Minimum	6.5	6.8	7.1	7.1	7.1	7.3	6.8	7.2	7.1	7.0	6.9	6.7
pH (S.U.) Maximum	7.1	7.3	7.3	7.4	7.6	7.8	7.3	7.5	7.6	7.4	7.4	7.5
DO (mg/L) Minimum	9.2	10.9	8.2	4.9	14.7	5.4	10.4	10.6	11.3	10.1	9.3	6.2
TRC (mg/L) Average Monthly	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
TRC (mg/L) Instantaneous Maximum	0.3	0.3	0.7	0.3	0.1	0.2	0.1	0.4	0.3	0.2	0.4	0.7
CBOD5 (mg/L) Average Monthly	< 2.3	< 2.5	< 2.2	2.4	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.6	< 2.2
TSS (mg/L) Average Monthly	< 2.5	< 2.5	7.0	< 2.5	< 2.8	< 2.5	< 2.8	< 2.5	< 2.5	3.8	< 4.3	< 2.5
Fecal Coliform (CFU/100 ml) Geometric Mean	< 1	< 1	< 1	< 1	< 1	1	< 11	1.0	2	1	< 1.0	< 1
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	< 1	1	< 1	< 1	< 1	1	115	1.0	3.1	1	< 1.0	< 1
Total Nitrogen (mg/L) Annual Average								< 3.935				
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 (mg/L) Average Monthly	0.8	0.5	0.5	0.4	0.4	0.3	0.4	0.3	0.5	0.6	0.6	0.6

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	Report Daily Max	XXX	XXX	XXX	XXX	1/week	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
TRC	XXX	XXX	XXX	0.36	XXX	1.2	1/day	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20	2/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20	2/month	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
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	1.0	XXX	2	2/month	Grab

Compliance Sampling Location: at Outfall 001, after 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 Total Residual Chlorine (TRC) limits are technology-based on Chapter 93.7. The limits for $CBOD_5$, Total Suspended Solids (TSS), and Fecal Coliforms are technology-based on Chapter 92a.47. The limits for Ammonia-Nitrogen are technology-based on Chapter 93.7. Monitoring for E. Coli and Total Nitrogen is based on Chapter 92a.61. The limits for Total Phosphorus are based on the Lake Erie 1969 International Joint Committee (IJC) agreement.

Attachment 1

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
15	62255	Trib 62255 to Lake Erie

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)
0.110	NE Marina	PA0104272	0.005	CBOD5	25		
				NH3-N	5.03	10.06	
				Dissolved Oxygen			4

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
15	62255	Trib 62255 to Lake Erie	**0.110**	597.00	0.16	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	0.070	0.00	0.00	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
NE Marina	PA0104272	0.0050	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	4.00	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
15	62255	Trib 62255 to Lake Erie	**0.000**	575.00	0.19	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	0.070	0.00	0.00	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 D.O.Simulation

SWP Basin	Stream Code	Stream Name
15	62255	Trib 62255 to Lake Erie

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
0.110	0.005	22.043	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
1.685	0.279	6.050	0.040
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
11.40	1.324	2.05	0.819
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
6.510	28.207	Owens	6
Reach Travel Time (days)			
0.167			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.017	11.12	2.03	6.95
0.033	10.86	2.00	7.23
0.050	10.60	1.97	7.42
0.067	10.34	1.94	7.54
0.083	10.10	1.92	7.63
0.100	9.85	1.89	7.69
0.117	9.62	1.87	7.74
0.133	9.39	1.84	7.78
0.150	9.16	1.82	7.81
0.167	8.94	1.79	7.84

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	6		

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
15	62255	Trib 62255 to Lake Erie

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												
0.110	0.01	0.00	0.01	.0077	0.03788	.279	1.69	6.05	0.04	0.167	22.04	7.00
Q1-10 Flow												
0.110	0.01	0.00	0.01	.0077	0.03788	NA	NA	NA	0.04	0.191	22.60	7.00
Q30-10 Flow												
0.110	0.02	0.00	0.02	.0077	0.03788	NA	NA	NA	0.04	0.150	21.68	7.00

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
15	62255	Trib 62255 to Lake Erie

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
0.110	NE Marina	13.52	26.04	13.52	26.04	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
0.110	NE Marina	1.69	5.03	1.69	5.03	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)		
0.11	NE Marina	25	25	5.03	5.03	4	4	0	0

Attachment 2

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.019	= Q stream (cfs)	0.5	= CV Daily
0.005	= 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)	0	=Decay Coefficient (K)

Source	Reference	AFC Calculations		Reference	CFC Calculations	
TRC	1.3.2.iii	WLA afc =	0.803	1.3.2.iii	WLA cfc =	0.775
PENTOXSD TRG	5.1a	LTAMULT afc =	0.373	5.1c	LTAMULT cfc =	0.581
PENTOXSD TRG	5.1b	LTA_afc=	0.299	5.1d	LTA_cfc =	0.451

Source		Effluent Limit Calculations		
PENTOXSD TRG	5.1f	AML MULT =	1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) =	0.368	AFC
		INST MAX LIMIT (mg/l) =	1.204	

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)**

Attachment 3

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

WATER MANAGEMENT SYSTEM
OPEN VIOLATIONS BY CLIENT

Client ID: **87637**
Client: **All**

Open Violations: **1**

CLIENT ID	CLIENT	PF ID	FACILITY	PF KIND	INSP PROGRAM	PROGRAM SPECIFIC ID
87637	PA FISH & BOAT COMM	465527	PA FISH BOAT COMM STACKHOUSE F	Transient NonCommunity	Safe Drinking Water	4140824

INSP ID	VIOLATION ID	INSPECTION CATEGORY	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR	INSP REGION
3529963	989996	PF	03/27/2023	B6A	OTHER VIOLATIONS DEEMED TO BE SIGNIFICANT DEFICIENCIES	HOLLISTER,SONDRA	NCRO