Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0084794**
Facility Type	**Non-Municipal**	APS ID	**780245**
Major / Minor	**Minor**	Authorization ID	**1478492**

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**The York Water Co.**	Facility Name	**Asbury Pointe Res Development**
Applicant Address	PO Box 15089 130 E Market Street	Facility Address	305 Riverview Road
	York, PA 17405-7089		Mount Wolf, PA 17347
Applicant Contact	Matthew Scarpato	Facility Contact	Vaughn Wenger
Applicant Phone	(717) 718-2977	Facility Phone	(717) 845-3601
Client ID	69800	Site ID	452614
Ch 94 Load Status	Not Overloaded	Municipality	East Manchester Township
Connection Status		County	York
Date Application Received	March 26, 2024	EPA Waived?	Yes
Date Application Accepted	April 3, 2024	If No, Reason	

Purpose of Application: Renewal of existing NPDES Permit

Summary of Review

The York Water Company has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit for the Asbury Pointe STP. The permit was last reissued on September 27, 2019 with an effective date of October 1, 2019. The permit expired on September 30, 2024, but the terms and conditions of the permit have been administratively extended since that time.

Based on the review outlined in this fact sheet, it is recommended that the permit be drafted, and a notice of the draft permit be published in the *Pennsylvania Bulletin* for public comments for 30 days. A file review of documents associated with the discharge or permittee may be available at the PA DEP southcentral regional office (SCRO), 909 Elmerton Avenue, Harrisburg, PA 17110. To make an appointment for file reviews, contact the SCRO file review coordinator at 717.705.4700.

Sludge use and disposal description and location*(s):* Smith Disposal Facility and Berstine Farm (Adams County)

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		*Aaron Baar* Aaron Baar / Project Manager	March 28, 2025
X		*Daniel W. Martin* Daniel W. Martin, P.E. / Environmental Engineer Manager	April 2, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.0784
Latitude	40º 3' 20.22"	Longitude	-76º 38' 40.45"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Codorus Creek (WWF)	Stream Code	08032
NHD Com ID	57465175	RMI	0.53
Drainage Area	278 sq. mi.	Yield (cfs/mi^2)	2.007
Q_{7-10} Flow (cfs)	37.2	Q_{7-10} Basis	USGS SteramStats
Elevation (ft)	245.02	Slope (ft/ft)	
Watershed No.	7-H	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	CAUSE UNKNOWN, FLOW REGIME MODIFICATION, TOXICITY		
Source(s) of Impairment	URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS		
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)	7.0	Default
Temperature (°C)	25.0	WWF Default
Hardness (mg/L)	100	Default
Other:		

Nearest Downstream Public Water Supply Intake		Wrightsville Water Supply Co.	
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	28.51	Distance from Outfall (mi)	~8 mi.

Drainage Area

The discharge is to Codorus Creek at RMI 0.53. A drainage area upstream of the discharge point is determined to be 278 sq.mi. according to USGS PA StreamStats available at https://streamstats.usgs.gov/ss/.

Stream Flow

According to StreamStats, the watershed has a Q_{7-10} of 37.2 cfs. This information was used to obtain a LFY, a chronic 30-day (Q_{30-10}) and acute (Q_{1-10}) exposure stream flows for the discharge point as follows (Guidance No. 391-2000-023).

Q_{7-10} = 37.2 cfs
Q_{30-10} = 1.36 * 37.2 cfs = 50.592 cfs
Q_{1-10} = 0.64 * 37.2 cfs = 23.808 cfs
LFY = 37.2 cfs/1.63 mi^2 = 2.007 cfs/mi^2

Codorus Creek

25 Pa Code §93.9 classifies the receiving water, Codorus Creek, with a WWF existing use designation. No special protection waters are impacted by this discharge. The discharge is in a stream segment listed as impaired for aquatic life due to urban runoff/storm sewers (source unknown) and flow regime modification. The receiving stream segment is also listed as impaired for recreational uses due to pathogens (source unknown) in the 2024 Integrated

Report. Effluent limits for this discharge have been developed to ensure that existing in-stream water uses and the level of water quality necessary to protect the existing uses are maintained and protected.

Local Watershed Total Maximum Daily Loads (TMDLs)

According to PA's 2024 Integrated Water Quality Monitoring and Assessment Report, Codorus Creek in the vicinity of the point of discharge is listed as impaired for aquatic life due to flow regime modification with a Category 4c designation, indicating that the waters are impaired for one or more uses not needing a TMDL because the impairment is not caused by a pollutant. The water way is listed as impaired for aquatic life due to siltation with a Category 5 designation, indicating that the waters are impaired for one or more uses by a pollutant that requires the development of a TMDL. The water way is listed as impaired for recreation with a Category 5 classification, indicating that the waters are impaired for one or more uses by a pollutant that requires the development of a TMDL. No local watershed TMDL has therefore been taken into consideration during this review.

Public Water Supply Intake

The nearest downstream public water supply intake is the Wrightsville Water Supply Co. intake located on the Susquehanna River approximately 8 miles from the discharge. Considering the distance and nature, the discharge is not expected to significantly affect the water supply.

Class A Wild Trout Streams

The receiving stream is not a Class A Wild Trout stream; therefore, no Class A Wild Trout Fishery is impacted by this discharge.

Treatment Facility Summary

Treatment Facility Name: Asbury Pointe

WQM Permit No.	Issuance Date
6791410 T-1	6/13/2012

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	Hypochlorite	0.0784

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0784	170	Not Overloaded	Aerobic Digestion	Other WWTP

The York Water Company owns and operates the Asbury Pointe sanitary wastewater treatment facility located in East Manchester Township, York County. The facility serves only the Asbury Pointe development, all wastes are residential in nature, and all sewer systems are 100% separated. Having both annual average design flow and hydraulic design capacity of 0.0784 MGD, this facility consists of a single influent comminutor, a flow splitter that divides flow between trains, six aeration tanks (per train), three secondary clarifiers (per train), one chlorine contact tank (per train), one polishing clarifier (per train), one post-aeration tank (per train) and the outfall (i.e., Outfall 001). Calcium hypochlorite (disinfection) is introduced via erosion chlorinators between the secondary clarifiers and the chlorine contact tank on each train. Soda ash (pH control) and poly-aluminum chloride (settling) are also utilized at the facility). Solids are treated onsite in two aerobic sludge digesters before being hauled offsite for disposal.

Note: The application incorrectly estimates the design annual average flow of the facility as 0.065 mgd.

Compliance History	
Summary of DMRs:	DMR results for the past year are presented below.
Summary of Inspections:	Since the last renewal of the facility's NPDES permit, the following inspections have been logged: March 5, 2020: A CEI was conducted by Austen Randecker. No violations were noted. Observations from the site visit were recorded. May 7, 2020: An administrative inspection was conducted by Austen Randecker via phone due to COVID19. No violations were noted. October 17, 2024: A CEI was conducted by Shawn Lesitsky. No violations were noted. Observations from the site visit were recorded.

Other Comments: As of March 28, 2025, there are no open violations associated with this permittee.

Existing Effluent Limitations and Monitoring Requirements

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	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.0	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
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
Nitrate-Nitrite	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Nitrate-Nitrite (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	Calculation
Total Nitrogen (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Ammonia Nov 1 - Apr 30	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Ammonia (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
TKN	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
TKN (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite

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		
Total Phosphorus (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation

Compliance Sampling Location: Outfall 001

Compliance History

DMR Data for Outfall 001 (from February 1, 2024 to January 31, 2025)

Parameter	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24
Flow (MGD) Average Monthly	0.015	0.016	0.016	0.016	0.016	0.016	0.016	0.015	0.016	0.017	0.016	0.015
Flow (MGD) Daily Maximum	0.021	0.021	0.022	0.021	0.023	0.020	0.020	0.019	0.022	0.042	0.029	0.020
pH (S.U.) Instantaneous Minimum	6.78	6.60	7.11	7.04	6.91	6.56	6.43	6.75	6.07	6.13	6.05	6.88
pH (S.U.) Instantaneous Maximum	7.99	7.91	8.03	7.97	8.15	8.19	8.03	7.96	8.06	7.96	8.07	7.98
DO (mg/L) Instantaneous Minimum	7.62	7.62	8.67	8.68	8.04	6.9	7.76	7.84	7.62	8.79	9.37	9.57
TRC (mg/L) Average Monthly	0.20	0.21	0.21	0.21	0.16	0.18	0.18	0.23	0.14	0.16	0.15	0.18
TRC (mg/L) Instantaneous Maximum	0.74	0.74	0.57	0.47	0.45	0.54	0.48	0.56	0.47	0.80	0.34	0.78
CBOD5 (mg/L) Average Monthly	4.7	< 3.4	< 2.5	< 3.0	< 3.3	< 2.4	< 3.2	< 2.7	3.8	8.1	5.6	4.1
CBOD5 (mg/L) Instantaneous Maximum	5.9	4.4	2.5	3.5	4.1	< 2.4	4.0	3.0	3.8	8.7	6.4	4.9
TSS (mg/L) Average Monthly	7.5	11.0	9.0	17.0	14.0	11.0	21.5	6.5	3.5	9.0	16.5	4.5
TSS (mg/L) Instantaneous Maximum	11.0	13.0	15	17.0	17.0	12.0	23.0	9.0	4.0	11.0	17.0	6.0
Fecal Coliform (No./100 ml) Geometric Mean	385	296	158	311	128	133	64	18	270	141	219	21
Fecal Coliform (No./100 ml) Instantaneous Maximum	649	308	172	980	276	205	78	26	613	291	365	23
Nitrate-Nitrite (mg/L) Average Monthly	34.5	37.5	40.5	37.5	39.0	40.0	34.5	36.5	31.5	22.6	39.0	9.1

Nitrate-Nitrite (lbs) Total Monthly	129	135	158	151.0	146	170	152	137	114	136	144	27
Total Nitrogen (mg/L) Average Monthly	< 35.25	< 38.70	< 41.00	< 38.95	< 40.40	< 41.5	< 35.00	< 37.0	< 35.5	< 26.8	< 43	22.05
Total Nitrogen (lbs) Total Monthly	< 132.5	< 138.7	< 159.9	< 156.6	< 151.2	< 176.5	< 153.9	< 138.9	< 128.5	< 171.9	< 159	66.7
Total Nitrogen (lbs) Total Annual					1540							
Ammonia (lbs/day) Average Monthly	< 0.02	< 0.01	< 0.02	< 0.01	< 0.01	< 0.05	< 0.02	< 0.01	< 0.01	0.71	< 0.02	0.93
Ammonia (mg/L) Average Monthly	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.4	< 0.1	< 0.1	< 0.1	2.1	< 0.1	8.9
Ammonia (lbs) Total Monthly	< 0.6	< 0.3	< 0.5	< 0.3	< 0.3	< 1.6	< 0.5	< 0.3	< 0.3	21.3	< 0.5	26.8
Ammonia (lbs) Total Annual					117							
TKN (mg/L) Average Monthly	< 0.8	< 1.2	< 0.5	< 1.5	< 1.4	< 1.5	< 0.5	< 0.5	< 4.0	< 4.3	< 4.0	13.0
TKN (lbs) Total Monthly	< 3	< 4	< 2	< 6	< 5	< 6	< 2	< 2	< 14	< 36	< 15	39
Total Phosphorus (lbs/day) Average Monthly	0.5	0.4	0.5	0.5	0.6	0.7	0.6	0.6	0.6	0.9	0.4	0.4
Total Phosphorus (mg/L) Average Monthly	3.5	3.7	3.9	4.1	4.6	5.0	4.3	5.0	5.5	4.4	3.9	3.4
Total Phosphorus (lbs) Total Monthly	13.95	13.18	14.85	16.12	17.25	20.93	18.76	18.75	20.00	27.75	13.64	10.15
Total Phosphorus (lbs) Total Annual					200							

Compliance History

Effluent Violations for Outfall 001, from: March 1, 2024 To: January 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	05/31/24	Geo Mean	270	No./100 ml	200	No./100 ml

Other Comments: The cause of the violation is listed in the DMR as unknown. TRC for most days in May 2024 were only recorded as 0.1 mg/L – significantly lower than normal.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .0784
Latitude 40º 3' 20.62" **Longitude** -76º 38' 41.61"
Wastewater Description: Sewage Effluent

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)

Comments: These standards apply, subject to water quality analysis and BPJ where applicable.

Water Quality-Based Limitations

CBOD5, NH3-N and Dissolved Oxygen (DO)

WQM 7.0 version 1.0b is a water quality model designed to assist DEP to determine appropriate permit requirements for CBOD5, NH3-N and DO. DEP's guidance no. 391-2000-007 provides the technical methods contained in WQM 7.0 for conducting wasteload allocation and for determining recommended NPDES effluent limits for point source discharges.

The model was utilized, and the model output indicated that existing WQBEL for CBOD5 and ammonia are still appropriate and protective of water quality.

A minimum of 5.0 mg/L for DO is an existing effluent limit and will remain unchanged in the draft permit as recommended by DEP's SOP. This requirement has also been assigned to other sewage facilities in the region. 5.0 mg/L is taken directly from 25 Pa. Code § 93.7(a) and it is also determined to be appropriate according to water quality modeling.

Total Residual Chlorine

Since chlorine is used for disinfection, Total Residual Chlorine (TRC) effluent levels must be regulated in accordance with 25 Pa Code §92a.48(b). DEP's TRC_CALC worksheet is utilized to determine if the existing BAT TBEL is still appropriate. The worksheet indicates that the existing limits of 0.5 mg/L (average monthly) and 1.0 mg/L (IMAX) are still protective of water quality.

Toxics

DEP's NPDES permit application for minor sewages (less than 0.1 MGD) does not require sampling for heavy metals including Total Copper, Total Lead, and Total Zinc.

Best Professional Judgment (BPJ) Limitations

Total Phosphorus & Total Nitrogen

DEP's SOP no. BPNPSM-PMT-033 recommends monitoring requirements for Total Phosphorus and Total Nitrogen for all sewage facilities. Therefore, routine monitoring for TKN, Nitrate-Nitrite, Total Nitrogen and Total Phosphorus are recommended to be continued in this permit renewal twice monthly.

Additional Considerations

Flow Monitoring

The requirement to monitor the volume of effluent will remain in the draft permit per 40 CFR § 122.44(i)(1)(ii).

E. Coli Monitoring

In conformity with the Department's *Establishing Effluent Limitations for Individual Sewage Permits* (SOP No. BCW-PMT-033) and as authorized by § 92a.61 of the PA Code, quarterly E. Coli monitoring has been proposed in this permit. The collection method will be via grab sample.

Chesapeake Bay TMDL

The Department formulated a strategy in April 2007, to comply with the EPA's and Chesapeake Bay Foundation's requirements to reduce point source loadings of Total Nitrogen (TN) and Total Phosphorus (TP) to the Bay. In the Strategy, sewage dischargers have been prioritized by Central Office based on their delivered TN loadings to the Bay. The highest priority (Phases 1, 2, and 3) dischargers received annual loading caps based on their design flow on August 29, 2005 and concentrations of 6 mg/l TN and 0.8 mg/l TP. Phase 4 (0.2 -0.4mgd) and Phase 5 (below 0.2mdg) facilities were required to monitor and report TN and TP during permit renewal at a monitoring frequency following Table 6-3 of DEP's Technical Guidance for Development and Specification of effluent Limitations (No. 362-0400-001).

EPA published the Chesapeake Bay Total Maximum Daily Load (TMDL) in December of 2010. Despite extensive restoration efforts during the past 25 years, the TMDL was prompted by insufficient progress and continued poor water quality in the Chesapeake Bay and its tidal tributaries.

In order to address the TMDL, Pennsylvania developed, in addition to the Bay Strategy, a Chesapeake Watershed Implementation Plan (WIP) Phase 1 in January 2011, Phase 2 in March 2012 and Phase 3 in December 2019. In accordance with the Phase 3 WIP, re-issuing permits for significant dischargers follow the same phased approach formulated in the original Bay strategy, whilst Phase 4 and Phase 5 will be required to monitor and report TN and TP during permit renewal.

The Phase 3 WIP categorizes this facility as a phase 5 non-significant sewage facility that has a design flow less than 0.2 MGD but greater than 0.002 MGD. The WIP recommends monitoring and reporting for Total Nitrogen and Total Phosphorus throughout the permit term at a frequency no less than annual. As discussed previously, continued twice monthly testing of these pollutants is proposed in this permit.

Monitoring Frequency and Sample Type

Unless discussed otherwise above, the permit's monitoring frequency and sample type for all parameters will remain unchanged from the last permit renewal.

Antidegradation Requirements

All effluent limitations and monitoring requirements have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected.

Anti-backsliding Requirement

All effluent limits proposed in this fact sheet are as stringent as effluent limits specified in the existing permit renewal. This approach is in accordance with 40 CFR §122.44(l(1).

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
	Monthly	Annual	Monthly	Monthly Average	Maximum	Instant. Maximum		
Total Nitrogen (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Ammonia (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation

Compliance Sampling Location: Outfall 001

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	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.0	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
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/quarter	Grab
Nitrate-Nitrite	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Nitrate-Nitrite (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	Calculation
Total Nitrogen (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Ammonia Nov 1 - Apr 30	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite

Outfall 001, 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	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Ammonia May 1 - Oct 31	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Ammonia (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
TKN	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
TKN (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Total Phosphorus (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation

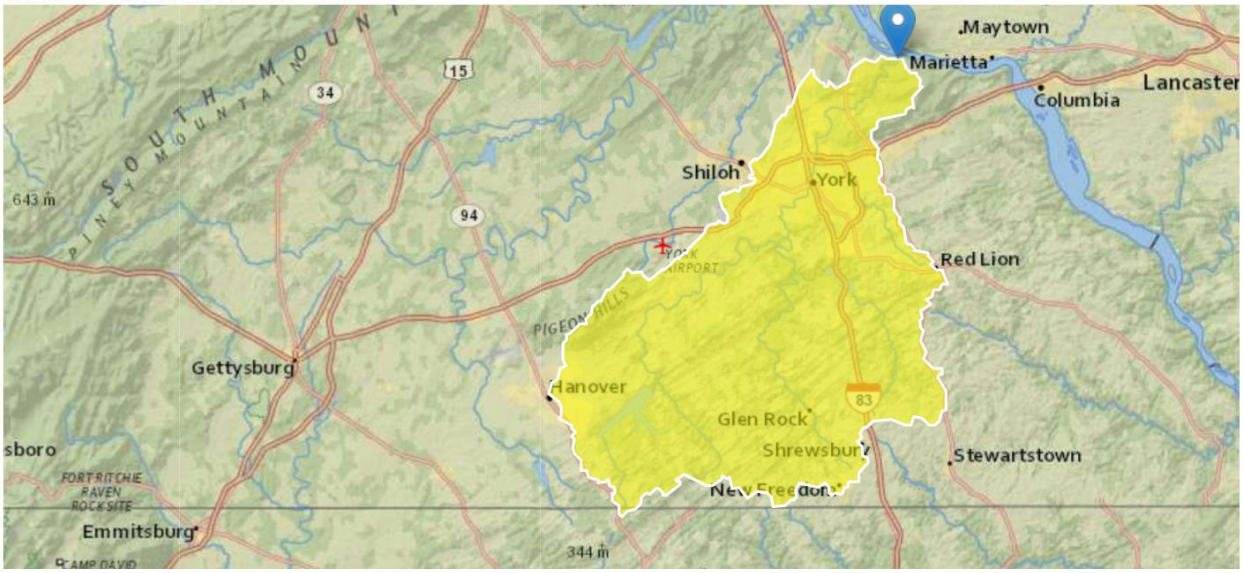
Compliance Sampling Location: Outfall 001

Tools and References Used to Develop Permit	
☒	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☒	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☒	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other:


347501 - DISCHARGE POINT
Ely Island
Saginaw
Codorus Furnace
Codorus Furnace Rd
Riverview Dr
Coventry Cross Rd
Abbey Dr
Asbury Ct
Devonshire Ct
Burbery Ln
N Burbery Ln
River Farm Rd
River Dr
Forge Ln
Furnace Rd
Jennifer Dr
Jerusalem School Rd
Lancaster
York

StreamStats Report

Region ID: PA
Workspace ID: PA20250328112944988000
Clicked Point (Latitude, Longitude): 40.05600, -76.64447
Time: 2025-03-28 07:30:10 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	5.7348	degrees
DRNAREA	Area that drains to a point on a stream	278	square miles
ROCKDEP	Depth to rock	4.4	feet
URBAN	Percentage of basin with urban development	10.842	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
BSLOPD	Mean Basin Slope degrees	5.7348	degrees	1.7	6.4
DRNAREA	Drainage Area	278	square miles	4.78	1150
ROCKDEP	Depth to Rock	4.4	feet	4.13	5.21
URBAN	Percent Urban	10.842	percent	0	89

Low-Flow Statistics Flow Report [Low Flow Region 1]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	65.1	ft^3/s	46	46
30 Day 2 Year Low Flow	81.9	ft^3/s	38	38
7 Day 10 Year Low Flow	37.2	ft^3/s	51	51
30 Day 10 Year Low Flow	46.6	ft^3/s	46	46
90 Day 10 Year Low Flow	64.1	ft^3/s	41	41

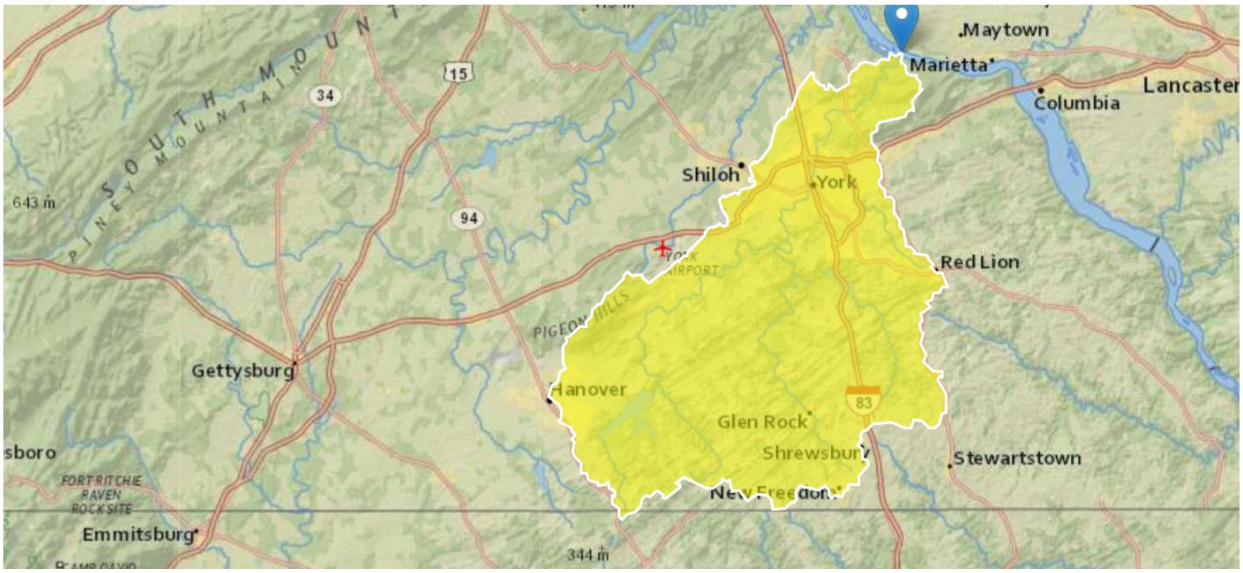
Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Application Version: 4.28.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats Report

Region ID: PA
Workspace ID: PA20250328113735368000
Clicked Point (Latitude, Longitude): 40.06208, -76.64007
Time: 2025-03-28 07:38:03 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	5.7332	degrees
DRNAREA	Area that drains to a point on a stream	278	square miles
ROCKDEP	Depth to rock	4.4	feet
URBAN	Percentage of basin with urban development	10.8354	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
BSLOPD	Mean Basin Slope degrees	5.7332	degrees	1.7	6.4
DRNAREA	Drainage Area	278	square miles	4.78	1150
ROCKDEP	Depth to Rock	4.4	feet	4.13	5.21
URBAN	Percent Urban	10.8354	percent	0	89

Low-Flow Statistics Flow Report [Low Flow Region 1]

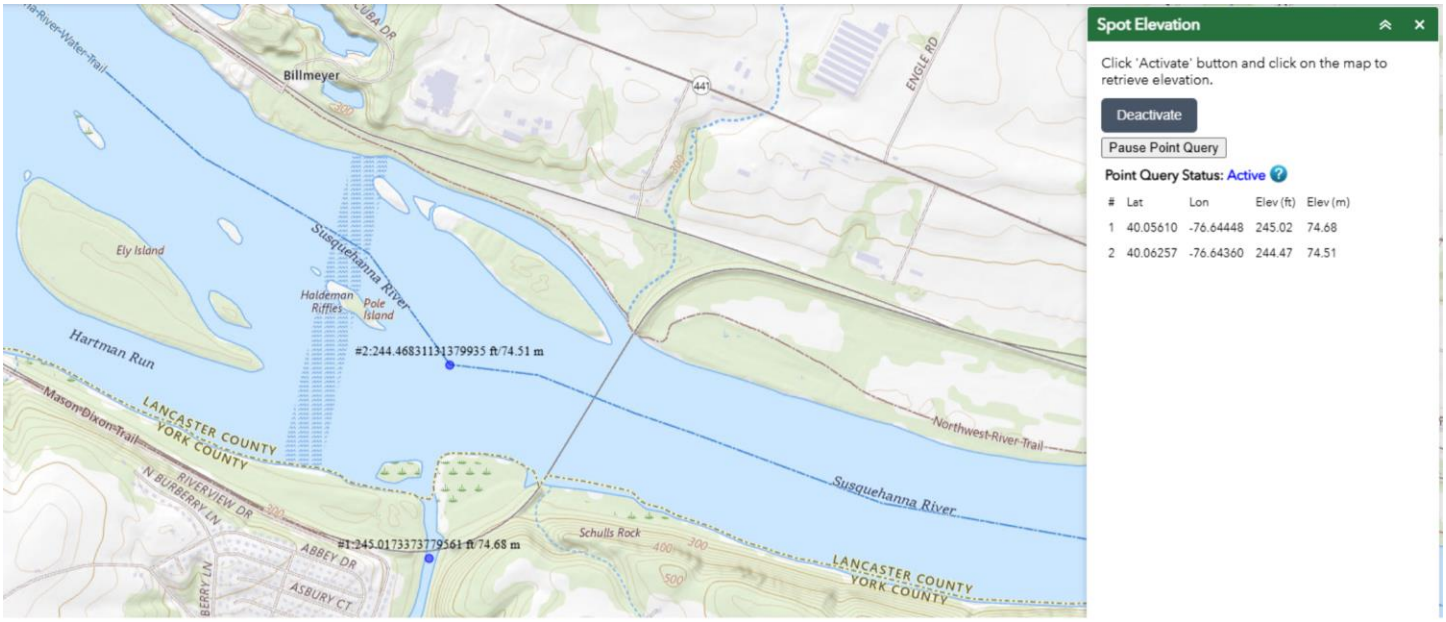
PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	65.1	ft^3/s	46	46
30 Day 2 Year Low Flow	81.9	ft^3/s	38	38
7 Day 10 Year Low Flow	37.1	ft^3/s	51	51
30 Day 10 Year Low Flow	46.5	ft^3/s	46	46
90 Day 10 Year Low Flow	64.1	ft^3/s	41	41

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Application Version: 4.28.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1


Spot Elevation
Click 'Activate' button and click on the map to retrieve elevation.
Deactivate
Pause Point Query
Point Query Status: Active
Lat Lon Elev (ft) Elev (m)
1 40.05610 -76.64448 245.02 74.68
2 40.06257 -76.64360 244.47 74.51
#2:244.46831131379935 ft/74.51 m
#1:245.01733737795561 ft/74.68 m
Billmeyer
Ely Island
Susquehanna River
Haldeman Riffles
Pole Island
Hartman Run
Mason-Dixon Trail
LANCASTER COUNTY
YORK COUNTY
Northwest River Trail
Schulls Rock
ENGLE RD
ABBEY DR
ASBURY CT
RIVERVIEW DR
N BURBERRY LN

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
07H	8032	CODORUS 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)
0.530	Ashbury Pointe	PA0084794	0.078	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			5

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
07H	8032	CODORUS 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
0.530	Ashbury Pointe	11.07	50	11.07	50	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
0.530	Ashbury Pointe	1.37	25	1.37	25	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)		
0.53	Ashbury Pointe	25	25	25	25	5	5	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
07H	8032	CODORUS CREEK

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
0.530	0.078	25.000	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
104.894	1.006	104.225	0.354
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
2.07	0.054	0.08	1.029
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
8.232	0.366	Tsivoglou	6
Reach Travel Time (days)			
0.091			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.009	2.07	0.08	7.54
0.018	2.07	0.08	7.54
0.027	2.07	0.08	7.54
0.037	2.07	0.08	7.54
0.046	2.07	0.08	7.54
0.055	2.07	0.08	7.54
0.064	2.07	0.08	7.54
0.073	2.06	0.08	7.54
0.082	2.06	0.07	7.54
0.091	2.06	0.07	7.54

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
07H	8032	CODORUS CREEK

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												
0.530	37.20	0.00	37.20	.1213	0.00020	1.006	104.89	104.23	0.35	0.091	25.00	7.00
Q1-10 Flow												
0.530	23.81	0.00	23.81	.1213	0.00020	NA	NA	NA	0.28	0.117	25.00	7.00
Q30-10 Flow												
0.530	50.59	0.00	50.59	.1213	0.00020	NA	NA	NA	0.42	0.077	25.00	7.00

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
07H	8032	CODORUS CREEK	**0.530**	245.02	278.00	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	0.000	0.00	37.20	0.000	0.000	0.0	0.00	0.00	25.00	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
Ashbury Pointe	PA0084794	0.0784	0.0784	0.0784	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	5.00	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
07H	8032	CODORUS CREEK	**0.001**	244.47	278.01	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	0.000	0.00	37.10	0.000	0.000	0.0	0.00	0.00	25.00	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	0.00	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

TRC_CALC

	B	C	D	E	F	G
2	**TRC EVALUATION**					
3	Input appropriate values in B4:B8 and E4:E7					
4	37.2	= Q stream (cfs)		0.5	= CV Daily	
5	0.0748	= Q discharge (MGD)		0.5	= CV Hourly	
6	30	= 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	0.5	= 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 = 102.570		1.3.2.iii	WLA cfc = 99.991
12	PENTOXSD TRG	5.1a	LTAMULT afc = 0.373		5.1c	LTAMULT cfc = 0.581
13	PENTOXSD TRG	5.1b	LTA_afc= 38.220		5.1d	LTA_cfc = 58.130
14						
15	Source		Effluent Limit Calculations			
16	PENTOXSD TRG	5.1f	AML MULT = 1.231			
17	PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500		BAT/BPJ	
18			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)**