Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0084565**
Facility Type	**Non-Municipal**	APS ID	**829648**
Major / Minor	**Minor**	Authorization ID	**1463705**

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**The York Water Co.**	Facility Name	**East Prospect STP**
Applicant Address	130 E Market Street	Facility Address	5230 E Prospect Road
	York, PA 17401-1219		York, PA 17406
Applicant Contact	Matthew Scarpato	Facility Contact	Vaughn Wenger
Applicant Phone	(717) 718-2977	Facility Phone	(717) 845-3601
Client ID	69800	Site ID	271342
Ch 94 Load Status	Existing Organic Overload	Municipality	Lower Windsor Township
Connection Status	No Limitations	County	York
Date Application Received	December 3, 2023	EPA Waived?	Yes
Date Application Accepted	December 6, 2023	If No, Reason	

Purpose of Application: Renewal of existing NPDES Permit

Summary of Review

The York Water Company (YWC) has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit for the East Prospect STP. The permit was last reissued to YWC on May 30, 2019. The permit expired on May 31, 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): Hauled offsite by Smith's Sanitary Septic Service

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	September 13, 2024
x		*Maria D. Bebenek* for Daniel W. Martin, P.E. / Environmental Engineer Manager	September 17, 2024

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.0875
Latitude	39º 57' 51.89"	Longitude	-76º 31' 49.86"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Cabin Creek (WWF)	Stream Code	07848
NHD Com ID	57467421	RMI	4.64
Drainage Area	11.7 sq. miles	Yield (cfs/mi^2)	0.2197
Q_{7-10} Flow (cfs)	2.57	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	336.23	Slope (ft/ft)	
Watershed No.	7-I	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	See Below		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	The York Water Company		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	22.84	Distance from Outfall (mi)	6.02

Drainage Area

The discharge is to Cabin Creek at RMI 4.64. A drainage area upstream of the discharge is determined to be 11.7 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 2.57 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} = 2.57 cfs
Q_{30-10} = 1.36 * 2.57 cfs = 3.49 cfs
Q_{1-10} = 0.64 * 0.157 cfs = 1.64 cfs
LFY = 0.157 cfs/4.4 mi^2 = 0.2197 cfs/mi^2

Cabin Creek

25 Pa Code §93.9 classifies the receiving water, Cabin Creek, with a WWF Existing Use designation. 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. The discharge is in a stream segment listed as not attaining use; the cause of the impairments have been identified as habitat alterations, agriculture and siltation (see *Local Watershed TMDL* below).

Local Watershed Total Maximum Daily Loads (TMDLs)

According to PA's 2024 integrated water quality monitoring and assessment report, Cabin Creek in the vicinity of the proposed point of discharge is impaired for aquatic life due to habitat alterations and siltation from habitat modifications other than hydromodification and siltation from agriculture. One impairment is listed as Category 4c in the 2024 integrated report, indicating that Cabin Creek is impaired for one or more uses not needing a TMDL because the impairment is not caused by a pollutant. However, two impairments are listed as Category 5 in the 2024 integrated

report, indicating that the water is impaired for one or more uses by a pollutant that requires the development of a TMDL. No TMDL has been developed for Cabin Creek to date, so no local watershed TMDL has been taken into consideration during this review.

Public Water Supply Intake

The nearest downstream public water supply intake is the York Water Company intake located on the Susquehanna River approximately 6 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: East Prospect STP

WQM Permit No.	Issuance Date
6706411 A-4	June 16, 2024

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	UV Disinfection	0.175

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.210	511	Existing Organic Overload		

The York Water Company owns and operates the East Prospect sanitary wastewater treatment facility located in Lower Windsor Township, York County. The facility serves portions of Lower Windsor Township and East Prospect Borough, all wastes are residential in nature, and all sewer systems are 100% separated. The annual average design flow is 0.175 MGD and the hydraulic design capacity is 0.210 MGD. This facility consists of a Flow Equalization tanks (x11), anoxic tank (x1, 2 trains), extended aeration (x1, 2 trains), secondary clarification (x1, 2 trains), UV disinfection, re-aeration, and solids handling. Solids are treated in aerobic digesters; solids are hauled offsite for disposal. Soda Ash is used to maintain alkalinity, PACL 2040 is used as a coagulant.

Changes Since Last Permit Issuance: The facility was upgraded to accommodate an annual average flow of 0.175 mgd and a max month flow of 0.210 mgd. A WQM amendment was issued on June 16, 2020 for changes to a previously approved WQM permit amendment for the upgrade of the facility. The approved changes in the 2020 WQM amendment were as follows:

1. Modifying the approved design such that new sludge holding tanks will be constructed in lieu of modifying existing structures for the same purpose. The effective sludge holding volume (70,700 gallons) is unchanged from the original design.
2. The addition of a soda ash feed system (with related appurtenances) for alkalinity supplementation is proposed.
3. The replacement of the existing UV disinfection system is proposed instead of modifying the existing system.. The proposed system is a Trojan 3200K-PTP rated for at least 0.175 mgd of flow.
4. The aeration system will be modified such that separate air lines will be extended to each aeration train in lieu of manifolding the supply lines together.
5. A post-disinfection re-aeration basin downstream of the UV disinfection units is proposed to meet the facility's DO limits.

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: May 6, 2020: An administrative inspection was conducted by phone by Austen Randecker. No violations were noted. June 3, 2021: A CEI was conducted by Erick Ammon. No violations or recommendations were noted.

Other Comments: As of September 13, 2024, there are no open violations associated with this facility or 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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD5	36.0	58.0	XXX	25.0	40.0	50	1/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TSS	43.0	65.0	XXX	30.0	45.0	60	1/week	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
UV Intensity (mW/cm²)	XXX	XXX	XXX	Report	XXX	Report	Continuous	Recorded
Nitrate-Nitrite	XXX	XXX	XXX	Report	XXX	XXX	2/week	24-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/week	24-Hr Composite
Ammonia May 1 - Oct 31	12.4	XXX	XXX	8.5	XXX	17	2/week	24-Hr Composite
Ammonia (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
TKN	XXX	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
TKN (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Phosphorus (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation

Compliance Sampling Location: Outfall 001

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	5859 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	974 Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation

Compliance Sampling Location: Outfall 001

Compliance History

DMR Data for Outfall 001 (from August 1, 2023 to July 31, 2024)

Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
Flow (MGD) Average Monthly	0.061	0.060	0.064	0.060	0.057	0.056	0.061	0.058	0.051	0.052	0.056	0.055
Flow (MGD) Daily Maximum	0.076	0.069	0.079	0.076	0.071	0.071	0.076	0.083	0.059	0.059	0.072	0.072
pH (S.U.) Instantaneous Minimum	6.53	6.6	6.53	6.6	6.39	6.86	6.26	6.22	6.62	6.38	6.72	6.6
pH (S.U.) Instantaneous Maximum	7.31	7.28	7.32	7.53	7.44	7.68	7.69	7.69	7.8	7.53	7.51	8.04
DO (mg/L) Instantaneous Minimum	6.77	7.66	6.82	7.61	8.14	8.57	7.39	8.35	7.32	6.55	6.33	6.32
CBOD5 (lbs/day) Average Monthly	< 1.7	< 1.8	< 1.4	< 1.3	1.9	< 1.3	2.1	< 1.8	< 1.3	1.7	< 1.0	< 1.0
CBOD5 (lbs/day) Weekly Average	2.5	2.9	2.1	< 1.5	2.2	1.9	2.9	< 3.3	1.8	2.3	< 1.0	< 1.0
CBOD5 (mg/L) Average Monthly	< 3.2	< 3.6	< 2.6	< 2.6	4.2	< 2.9	4.2	< 3.9	< 3.2	4.0	< 2.0	< 2.0
CBOD5 (mg/L) Weekly Average	4.7	5.7	3.3	2.8	4.8	4.3	4.8	6.4	4.3	5.3	2.0	< 2.0
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	262	210	178	194	162	140	168	167	172	165	130	157
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	340	320	300	257	192	168	263	184	184	212	148	175
BOD5 (mg/L) Raw Sewage Influent Average Monthly	506	418	330	401	354	314	338	365	429	399	292	358
TSS (lbs/day) Average Monthly	2.2	3.8	1.7	2.9	1.9	2.1	3.5	3.2	2.3	3.1	3.0	1.0
TSS (lbs/day) Raw Sewage Influent Average Monthly	271	154	134	157	144	121	119	156	160	175	134	167

TSS (lbs/day) Raw Sewage Influent Daily Maximum	399	209	263	235	176	173	210	168	221	239	184	205
TSS (lbs/day) Weekly Average	3.5	6.0	3.4	5.1	2.8	4.1	6.1	4.4	2.9	4.4	5.0	2.0
TSS (mg/L) Average Monthly	4.4	7.5	3.2	6.0	4.3	4.8	7.2	7.0	5.6	7.5	7.0	3.0
TSS (mg/L) Raw Sewage Influent Average Monthly	520	305	246	332	315	273	235	340	397	426	301	379
TSS (mg/L) Weekly Average	7.0	12.0	7.0	11.0	6.0	9.0	13.0	9.0	7.0	10.0	11.0	5.0
Fecal Coliform (No./100 ml) Geometric Mean	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2.0
Fecal Coliform (No./100 ml) Instantaneous Maximum	5	< 1	< 1	1	1	2	< 1	4	3	7	1	10.0
UV Intensity (mW/cm²) Average Monthly	10.3	8.4	9.5	8.2	7.3	7.0	7.1	8.3	8.9	10.1	12.4	12.7
UV Intensity (mW/cm²) Instantaneous Maximum	13.6	12.8	14	11.4	8.9	9.9	10.4	12.3	14	14	13.2	14.0
Nitrate-Nitrite (mg/L) Average Monthly	13.7	21.1	17.9	15.8	15.4	15.3	19.4	21.8	23.3	19.9	14.8	< 14.5
Nitrate-Nitrite (lbs) Total Monthly	225	334	317	274	237	221	316	343	300	9.1	215	< 212
Total Nitrogen (mg/L) Average Monthly	< 14.5	< 21.8	< 18.5	< 16.6	< 16.3	< 15.8	< 21.1	< 22.8	< 23.8	< 20.4	< 15.3	< 15.29
Total Nitrogen (lbs) Total Monthly	< 238	< 346	< 327	< 288	252	< 229	< 341	< 362	< 279	< 290	< 222	< 224
Total Nitrogen (lbs) Total Annual											2966	
Ammonia (lbs/day) Average Monthly	< 0.05	< 0.306	< 0.06	< 0.06	< 0.12	< 0.06	< 0.50	< 0.06	< 0.05	< 0.05	< 0.05	< 0.05
Ammonia (mg/L) Average Monthly	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2	< 0.1	< 1.0	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (lbs) Total Monthly	< 1.6	< 1.7	< 1.8	< 1.7	< 3.7	< 1.7	< 15.5	< 1.7	< 1.6	< 1.4	< 1.5	< 1.5
Ammonia (lbs) Total Annual											38	
TKN (mg/L) Average Monthly	< 0.8	< 0.7	< 0.6	< 0.8	< 1.0	< 0.5	< 1.7	< 1.0	< 0.5	< 0.5	< 0.5	< 0.83

TKN (lbs) Total Monthly	< 13	< 12	< 10	< 14	< 14	< 8	< 26	< 20	< 7	< 7	< 7	< 12.0
Total Phosphorus (lbs/day) Average Monthly	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2
Total Phosphorus (mg/L) Average Monthly	0.73	0.77	0.50	0.32	0.37	0.35	0.49	0.50	0.47	0.62	0.59	0.52
Total Phosphorus (lbs) Total Monthly	12	12	9	6	6	5	8	9	6	8	9.0	8.0
Total Phosphorus (lbs) Total Annual											91	

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .0875
Latitude 39º 57' 53.81" **Longitude** -76º 31' 51.17"
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 TBEL for CBOD5 is still protective of water quality and the existing WQBELs for NH3-N could be higher given current flow conditions in the receiving water, but due to anti-backsliding provisions the existing limits will be left intact.

The model also indicates that the existing DO limit of 5.0 mg/L is still protective of water quality.

Toxics

DEP's NPDES permit application for minor sewages requires sampling for Total Copper, Total Lead, and Total Zinc when commercial and industrial operations are in the service area. Sample data for these three parameters was submitted by the permittee and analyzed utilizing the department's Toxic Management Spreadsheet (v. 1.3); no limits or reporting requirements are recommended at this time.

Best Professional Judgment (BPJ) Limitations

Total Phosphorus & Total Nitrogen

DEP's SOP no. BPNPSM-PMT-033 (Establishing Effluent Limitations for Individual Sewage Permits) recommends monitoring requirements for Total Phosphorus and Total Nitrogen for all sewage facilities. Therefore, a routine monitoring for TKN, Nitrate-Nitrite, and TN are recommended to be continued in this permit. Sampling frequency for TKN, Nitrate-Nitrite, TN, and TP are currently required 1/week.

UV Disinfection

SOP No. BPNPSM-PMT- 033 requires monitoring of UV transmittance (%), UV dosage (µW/cm^2 or mj/cm^2), or UV intensity (µW/cm^2 or mj/cm^2) at the same monitoring frequency that would be used for TRC. The existing monitoring and reporting requirement for UV intensity (mW/cm^2) from the last renewal will continue. Minor changes were made to the reporting requirements to clarify what is to be reported by the permittee – measurement frequency was update from "continuous" to "1/day" and the requirement to report the instantaneous maximum was changed to reporting of daily minimum to better track when UV disinfection might be impaired.

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, annual 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 4 non-significant sewage facility that has a design flow less than 0.4 MGD but greater than or equal to 0.2 MGD. Phase 4 renewed or amended permits that include an increase in design flow will contain Cap Loads based on the lesser of a) existing TN and TP concentrations at current design average annual flow or b) 7,306 lbs/yr TN and 974 lbs/yr TP. Cap loads calculated during the last permit cycle for the upgraded facility will be continued in this permit – 5859 pounds of TN/year and 974 Lbs TP/year.

The WIP recommends monitoring and reporting for Total Nitrogen and Total Phosphorus throughout the permit term at a frequency no less than annual. Ammonia and TP are currently required to be evaluated 2/week. In Conformity with DEP Guidance Document 362-0400-001, the testing frequency of Ammonia and TP are proposed to be reduced to 1/week in this renewal.

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
	Average Monthly	Weekly Average	Daily Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD5	36.0	28.0	XXX	25.0	40.0	50	1/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	Report Daily Max	XXX	1/week	24-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	Report Daily Max	XXX	1/week	24-Hr Composite
TSS	43.0	65.0	XXX	30.0	45.0	60	1/week	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
UV Intensity (mW/cm^2)	XXX	XXX	Report	Report	XXX	XXX	1/day	Recorded
Nitrate-Nitrite	XXX	XXX	XXX	Report	Report Daily Max	XXX	1/week	24-Hr Composite
Nitrate-Nitrite (lbs)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Calculation

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	Weekly Average	Daily Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/week	Calculation
Total Nitrogen (lbs)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Ammonia Nov 1 - Apr 30	Report	Report Daily Max	XXX	Report	Report Daily Max	XXX	1/week	24-Hr Composite
Ammonia May 1 - Oct 31	12.4	Report Daily Max	XXX	8.5	Report Daily Max	17	1/week	24-Hr Composite
Ammonia (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
TKN	XXX	XXX	XXX	Report	Report Daily Max	XXX	1/week	24-Hr Composite
TKN (lbs)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	XXX	XXX	Report	Report Daily Max	XXX	1/week	24-Hr Composite
Total Phosphorus (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation

Compliance Sampling Location: Outfall 001

Proposed Effluent Limitations and Monitoring Requirements

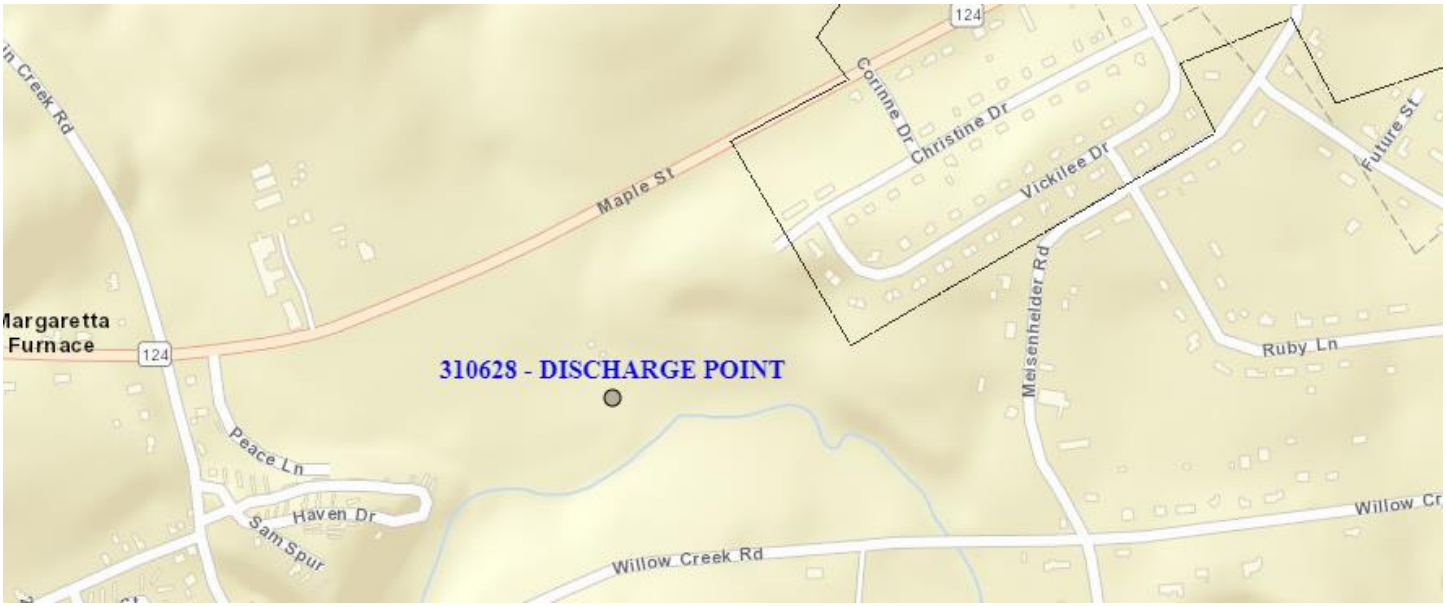
The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). 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
	Monthly	Annual	Monthly	Monthly Average	Maximum	Instant. Maximum		
Total Nitrogen (lbs)	XXX	5859 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	974 Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation

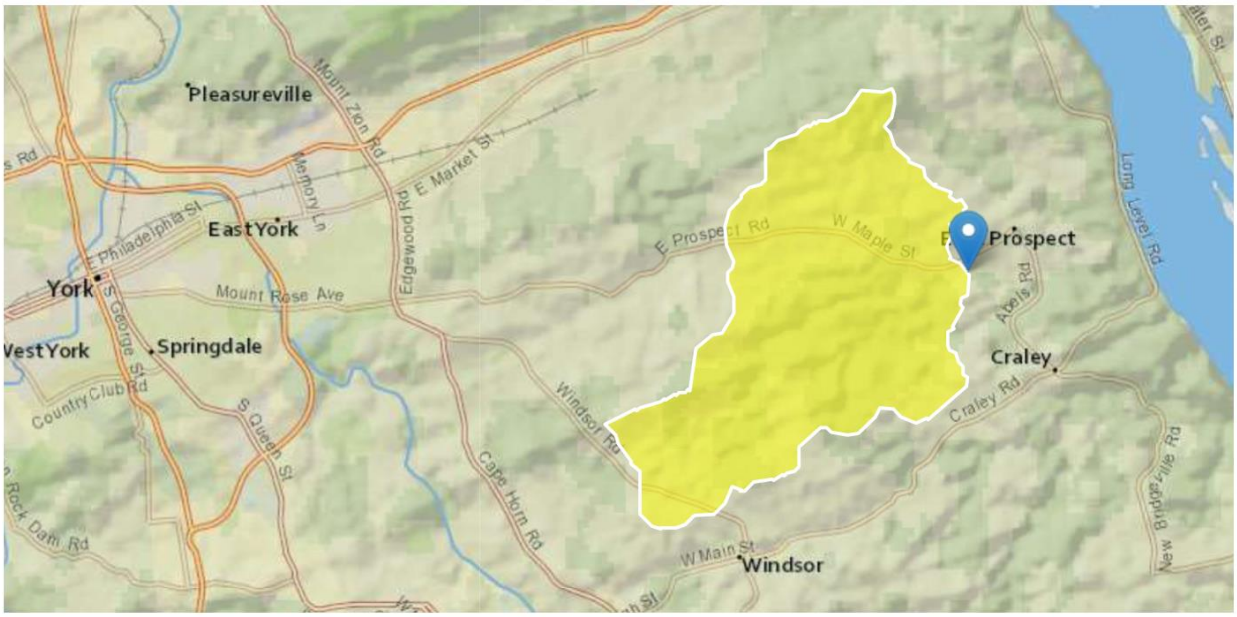
Compliance Sampling Location: Outfall 001

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:


124
Corinne Dr
Christine Dr
Vickilee Dr
Future St
Maple St
Margaretta Furnace
124
310628 - DISCHARGE POINT
Meisenhelder Rd
Ruby Ln
Peace Ln
Haven Dr
Sam Spur
Willow Creek Rd

StreamStats Report

Region ID: PA
Workspace ID: PA20240913112906898000
Clicked Point (Latitude, Longitude): 39.96439, -76.53053
Time: 2024-09-13 07:29:29 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	6.5985	degrees
DRNAREA	Area that drains to a point on a stream	11.7	square miles
ROCKDEP	Depth to rock	5	feet
URBAN	Percentage of basin with urban development	1.2267	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	11.7	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	6.5985	degrees	1.7	6.4

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
ROCKDEP	Depth to Rock	5	feet	4.13	5.21
URBAN	Percent Urban	1.2267	percent	0	89

Low-Flow Statistics Disclaimers [Low Flow Region 1]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

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

Statistic	Value	Unit
7 Day 2 Year Low Flow	4.61	ft^3/s
30 Day 2 Year Low Flow	5.34	ft^3/s
7 Day 10 Year Low Flow	2.57	ft^3/s
30 Day 10 Year Low Flow	3.03	ft^3/s
90 Day 10 Year Low Flow	3.81	ft^3/s

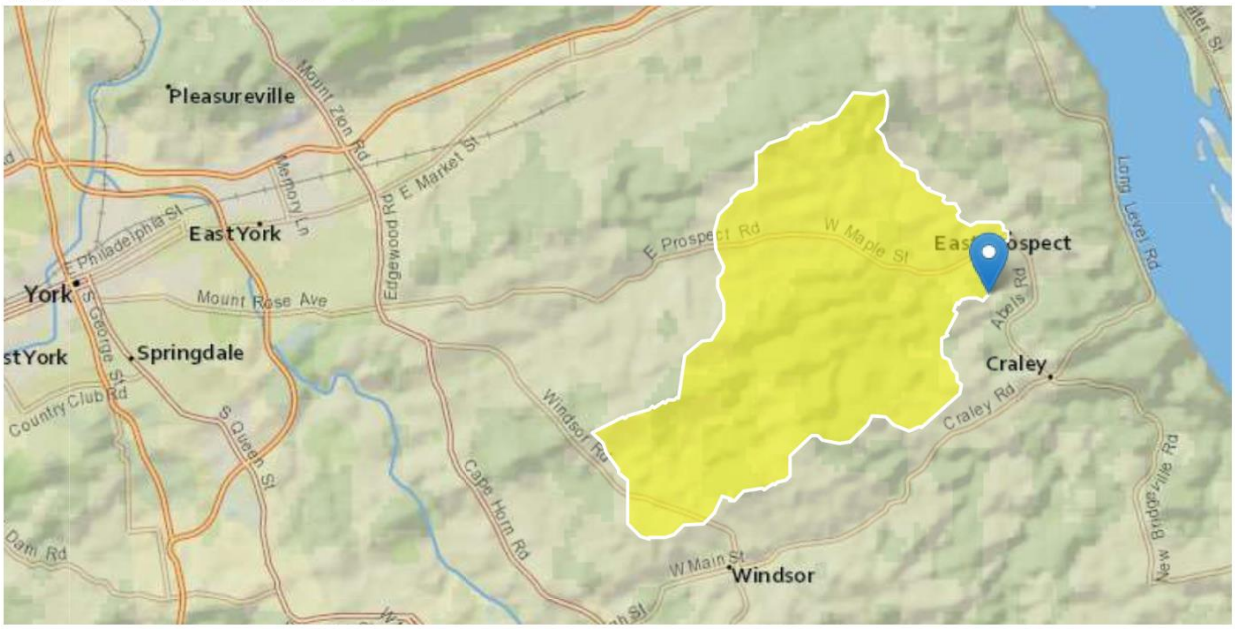
Low-Flow Statistics Citations

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: 4.23.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats Report

Region ID: PA
Workspace ID: PA20240913114359288000
Clicked Point (Latitude, Longitude): 39.96166, -76.52445
Time: 2024-09-13 07:44:24 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	6.5563	degrees
DRNAREA	Area that drains to a point on a stream	12.2	square miles
ROCKDEP	Depth to rock	5	feet
URBAN	Percentage of basin with urban development	1.5559	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	12.2	square miles	4.78	1150

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
BSLOPD	Mean Basin Slope degrees	6.5563	degrees	1.7	6.4
ROCKDEP	Depth to Rock	5	feet	4.13	5.21
URBAN	Percent Urban	1.5559	percent	0	89

Low-Flow Statistics Disclaimers [Low Flow Region 1]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

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

Statistic	Value	Unit
7 Day 2 Year Low Flow	4.8	ft^3/s
30 Day 2 Year Low Flow	5.57	ft^3/s
7 Day 10 Year Low Flow	2.68	ft^3/s
30 Day 10 Year Low Flow	3.16	ft^3/s
90 Day 10 Year Low Flow	3.98	ft^3/s

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: 4.23.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
07I	7848	CABIN 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)
4.640	East Prospect	PA0084565	0.175	CBOD5	25		
				NH3-N	19.02	38.04	
				Dissolved Oxygen			5

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
07I	7848	CABIN 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
4.640	East Prospect	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
4.640	East Prospect	1.37	19.02	1.37	19.02	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)		
4.64	East Prospect	25	25	19.02	19.02	5	5	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
07I	7848	CABIN CREEK

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
4.640	0.175	25.000	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
21.608	0.595	36.344	0.221
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
4.19	0.807	1.81	1.029
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
7.934	12.965	Tsivoglou	6
Reach Travel Time (days)			
0.130			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.013	4.14	1.79	7.54
0.026	4.08	1.76	7.54
0.039	4.03	1.74	7.54
0.052	3.98	1.72	7.54
0.065	3.92	1.70	7.54
0.078	3.87	1.67	7.52
0.091	3.82	1.65	7.49
0.104	3.77	1.63	7.46
0.117	3.72	1.61	7.45
0.130	3.67	1.59	7.43

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
07I	7848	CABIN 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												
4.640	2.57	0.00	2.57	.2707	0.00548	.595	21.61	36.34	0.22	0.130	25.00	7.00
Q1-10 Flow												
4.640	1.64	0.00	1.64	.2707	0.00548	NA	NA	NA	0.18	0.162	25.00	7.00
Q30-10 Flow												
4.640	3.50	0.00	3.50	.2707	0.00548	NA	NA	NA	0.26	0.111	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
07I	7848	CABIN CREEK	**4.640**	336.23	11.70	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	0.100	0.00	2.57	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
East Prospect	PA0084565	0.1750	0.1750	0.1750	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
07I	7848	CABIN CREEK	**4.170**	322.63	12.20	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	0.100	0.00	2.68	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	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

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Toxics Management Spreadsheet
Version 1.3, March 2021

Discharge Information

Instructions | Discharge | Stream

Facility: **York Water - East Prospect STP** NPDES Permit No.: **PA0084565** Outfall No.: **001**

Evaluation Type: **Custom / Additives** Wastewater Description: **Treated Sewage**

Discharge Characteristics								
Design Flow (MGD)*	Hardness (mg/l)*	pH (SU)*	Partial Mix Factors (PMFs)				Complete Mix Times (min)	
			AFC	CFC	THH	CRL	Q_{7-10}	Q_h
0.175	100	7						

				0 if left blank		*0.5 if left blank*		*0 if left blank*			*1 if left blank*	
Discharge Pollutant	Units	Max Discharge Conc		Trib Conc	Stream Conc	Daily CV	Hourly CV	Strea m CV	Fate Coeff	FOS	Criteri a Mod	Chem Transl
Total Copper	mg/L	<	0.005									
Total Lead	mg/L	<	0.001									
Total Zinc	mg/L		0.04									

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Toxics Management Spreadsheet
Version 1.3, March 2021

Stream / Surface Water Information

York Water - East Prospect STP, NPDES Permit No. PA0084565, Outfall 001

Instructions | Discharge | *Stream*

Receiving Surface Water Name: **Cabin Creek**

No. Reaches to Model: 1

- (●) Statewide Criteria
- ( ) Great Lakes Criteria
- ( ) ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi^2)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	007848	4.64	336.23	11.7			Yes
End of Reach 1	007848	4.17	322.63	12.2			Yes

***Q* 7-10**

Location	RMI	LFY (cfs/mi^2)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	4.64	0.1	2.57									100	7		
End of Reach 1	4.17	0.1	2.68												

***Q* h**

Location	RMI	LFY (cfs/mi^2)	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	4.64														
End of Reach 1	4.17														

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Toxics Management Spreadsheet
Version 1.3, March 2021

Model Results

York Water - East Prospect STP, NPDES Permit No. PA0084565, Outfall 001

Instructions | Results | RETURN TO INPUTS | SAVE AS PDF | PRINT | ◉ All | ○ Inputs | ○ Results | ○ Limits

☐ ***Hydrodynamics***

☑ ***Wasteload Allocations***

☑ ***AFC*** CCT (min): 15 PMF: 0.986 Analysis Hardness (mg/l): 100 Analysis pH: 7.00

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Copper	0	0		0	13.439	14.0	145	Chem Translator of 0.96 applied
Total Lead	0	0		0	64.581	81.6	846	Chem Translator of 0.791 applied
Total Zinc	0	0		0	117.180	120	1,241	Chem Translator of 0.978 applied

☑ ***CFC*** CCT (min): 15.434 PMF: 1 Analysis Hardness (mg/l): 100 Analysis pH: 7.00

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Copper	0	0		0	8.956	9.33	97.9	Chem Translator of 0.96 applied
Total Lead	0	0		0	2.517	3.18	33.4	Chem Translator of 0.791 applied
Total Zinc	0	0		0	118.139	120	1,257	Chem Translator of 0.986 applied

☑ ***THH*** CCT (min): 15.434 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Copper	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	

☑ ***CRL*** CCT (min): 5.561 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Copper	0	0		0	N/A	N/A	N/A	

Total Lead	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	

☑ ***Recommended WQBELs & Monitoring Requirements***

No. Samples/Month: 4

	Mass Limits		*Concentration Limits*						
Pollutants	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units	Governing WQBEL	WQBEL Basis	Comments

☑ ***Other Pollutants without Limits or Monitoring***

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

Pollutants	Governing WQBEL	Units	Comments
Total Copper	0.093	mg/L	Discharge Conc ≤ 10% WQBEL
Total Lead	N/A	N/A	Discharge Conc < TQL
Total Zinc	796	µg/L	Discharge Conc ≤ 10% WQBEL