

Application Type

Renewal

Facility Type

Non-Municipal

Major / Minor

Minor

Application No.

**PA0080861**

APS ID

**606119**

Authorization ID

**1464023**

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

**Applicant and Facility Information**

Applicant Name	<b>Walmar MHC LLC</b>	Facility Name	<b>Walmar Manor MHP</b>
Applicant Address	524 Meadow Avenue Loop	Facility Address	125 Walmar Manor
	Banner Elk, NC 28604-9443		Dillsburg, PA 17019-1419
Applicant Contact	Matthew Raynor	Facility Contact	Matthew Raynor
Applicant Phone	(828) 733-5028	Facility Phone	(828) 733-5028
Client ID	250418	Site ID	271425
Ch 94 Load Status	Not Overloaded	Municipality	Franklin Township
Connection Status		County	York
Date Application Received	December 1, 2023	EPA Waived?	Yes
Date Application Accepted	January 18, 2024	If No, Reason	
Purpose of Application	Renewal of existing NPDES permit		

**Summary of Review**

Walmar MHC LLC has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit. The permit was last reissued to Walmar MHC LLC on April 17, 2019. The permit expired on April 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): Hauled offsite by Walton Water 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	October 24, 2024
x		Maria D. Bebeneck for Daniel W. Martin, P.E. / Environmental Engineer Manager	November 8, 2024

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.0375
Latitude	40° 3' 34.57"	Longitude	-77° 3' 37.52"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	North Branch Bermudian Creek (WWF)	Stream Code	08640
NHD Com ID	57467037	RMI	9.02
Drainage Area	3.14 sq. miles	Yield (cfs/mi <sup>2</sup> )	0.0962
Q <sub>7-10</sub> Flow (cfs)	0.302	Q <sub>7-10</sub> Basis	USGS StreamStats
Elevation (ft)	517.64	Slope (ft/ft)	
Watershed No.	7-F	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	NUTRIENTS		
Source(s) of Impairment	AGRICULTURE		
TMDL Status	Name		
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)	~56

Changes Since Last Permit Issuance: No changes since the last issuance of the Walmar MHC LLC's NPDES permit.

#### Drainage Area

The discharge is to North Branch Bermudian Creek at RMI 9.02. A drainage area upstream of the discharge is determined to be 3.14 sq.mi. according to USGS PA StreamStats available at <https://streamstats.usgs.gov/ss/>.

#### Stream Flow

According to StreamStats, the watershed has a Q<sub>7-10</sub> of 0.302 cfs. This information was used to obtain a LFY, a chronic 30-day (Q<sub>30-10</sub>) and acute (Q<sub>1-10</sub>) exposure stream flows for the discharge point as follows (Guidance No. 391-2000-023).

$$\begin{aligned}
 Q_{7-10} &= 0.302 \text{ cfs} \\
 Q_{30-10} &= 1.36 * 0.302 \text{ cfs} = 0.4107 \text{ cfs} \\
 Q_{1-10} &= 0.64 * 0.302 \text{ cfs} = 0.1933 \text{ cfs} \\
 \text{LFY} &= 0.302 \text{ cfs} / 3.14 \text{ mi}^2 = 0.0962 \text{ cfs/mi}^2
 \end{aligned}$$

#### North Branch Bermudian Creek

25 Pa Code §93.9 classifies the receiving water, North Branch Bermudian 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 not attaining use (aquatic life and recreation) 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, North Branch Bermudian Creek in the vicinity of the point of discharge is impaired for aquatic life (agriculture) due to nutrients and recreation

(pathogens) due to due to an unknown source. Both impairments are listed as Category 5, indicating that North Branch Bermudian is impaired for one or more uses by a pollutant that requires the development of a TMDL. A TMDL for this waterway has not been developed to date.

*Public Water Supply Intake*

The nearest downstream public water supply intake is The Wrightsville Water Supply Company intake located on the Susquehanna River approximately 56 miles from the discharge. Considering the distance and nature, the discharge is not expected to 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				
<b>Treatment Facility Name:</b> Walmar Manor MHP				
<b>WQM Permit No.</b>	<b>Issuance Date</b>			
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	Gas Chlorine	0.0375
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0375		Not Overloaded	Aerobic Digestion	Other WWTP

Walmar MHC LLC owns and operates the sanitary wastewater treatment facility located in Franklin Township, York County. This NPDES permit covers discharges of sewage treated by the Walmar MHC STP. The facility serves the Walmar MHC; all sewer systems are 100% separated. With an annual average design flow 0.0375 MGD, this facility utilizes an extended aeration system consisting of:

Aeration Tank (2) ⇒ Clarifier (2) ⇒ Chlorine Contact Tank (2) ⇒ Dechlorination Tank (1) ⇒ Discharge

The system incorporates the chemical additions of sodium hypochlorite (for disinfection), sodium bisulfite (for disinfection), and soda ash (for pH control). Two sludge holding tanks are used for solids storage. There are no industrial/commercial user contributing industrial wastewater.

Compliance History	
<b>Summary of DMRs:</b>	DMR results for the past year are presented below.
<b>Summary of Inspections:</b>	<p>Since the last renewal of the facility's NPDES permit, the following inspections have been logged:</p> <p>February 10, 2020: A CEI was conducted by Austen Randecker. No violations were noted. Recommendations were made to keep 3 years of DMRs and lab results, removing scum and solids from the clarifiers, repairing air line leaks, maintaining emergency stand-by power on site, and updating the Emergency Response Plan.</p> <p>August 20, 2021: A CEI was conducted by Brandon Bettinger. Five violations were noted: failure to immediately report to DEP a pollution incident, failure to maintain permitted treatment units, violations of effluent limits, unauthorized/unpermitted discharge of sewage to waters of the Commonwealth, and failure to monitor flow as required by the NPDES permit.</p> <p>October 13, 2022: A CO&amp;A was entered into by Walmar MHC LLC and DEP to repair the existing treatment units, to begin maintaining O&amp;M records, to manage and properly dispose sewage sludge produced by the STP, develop SOPs for the operation of the plant, and produce a general Work Plan, a Site-Specific Management Plan and a Process Control Plan</p> <p>December 6, 2023: A NOV was issued to the permittee for failure to submit a NPDES Permit Renewal Application on time.</p>

Other Comments: As of August 24, 2024, there is one open violations associated with this facility. The final permit will not be issued until this violation has been resolved.

Existing Effluent Limitations and Monitoring Requirements

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	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	0.27	XXX	0.89	1/day	Grab
CBOD5	Report	Report	XXX	25.0	40.0	50	2/month	8-Hr Composite
TSS	Report	Report	XXX	30.0	45.0	60	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	10.5	XXX	21.0	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	Report	XXX	XXX	3.5	XXX	7.0	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	2.0	XXX	4.0	2/month	8-Hr Composite

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
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 September 1, 2023 to August 31, 2024)**

Parameter	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23
Flow (MGD) Average Monthly	0.0312	0.0223	0.0242	0.0288	0.0278	0.0300	0.0319	0.0380	0.0227	0.0185	0.0165	0.0183
Flow (MGD) Daily Maximum	0.0744	0.0369	0.0462	0.0598	0.0740	0.0636	0.0683	0.0858	0.0708	0.0488	0.0599	0.0467
pH (S.U.) Instantaneous Minimum	7.63	7.38	7.94	7.83	7.66	7.95	7.85	7.28	7.95	7.85	7.81	7.13
pH (S.U.) Instantaneous Maximum	8.29	8.11	8.29	8.32	8.29	8.31	8.61	8.25	8.39	8.30	8.27	8.25
DO (mg/L) Instantaneous Minimum	5.1	5.2	7.5	5.2	5.9	8.8	8.8	5.2	5.2	9.1	8.4	5.7
TRC (mg/L) Average Monthly	0.01	0.01	0.01	0.01	0.01	0.03	0.02	0.01	< 0.03	< 0.03	0.01	< 0.06
TRC (mg/L) Instantaneous Maximum	0.07	0.05	0.05	0.05	0.06	0.08	0.05	0.06	0.10	0.05	0.08	0.10
CBOD5 (lbs/day) Average Monthly	< 0.51	0.52	< 0.44	< 0.60	< 0.48	1.0	< 0.73	1.0	< 0.34	< 0.71	< 0.30	< 0.41
CBOD5 (lbs/day) Weekly Average	< 0.66	0.58	0.60	< 0.89	< 0.50	1.11	0.75	1.1	< 0.35	1.2	< 0.36	0.43
CBOD5 (mg/L) Average Monthly	< 2.4	2.8	< 3.20	< 2.4	< 2.70	4.0	< 3.20	3.5	< 2.4	< 4.20	< 2.4	< 2.75
CBOD5 (mg/L) Weekly Average	< 2.4	3.1	4.0	< 2.4	3.00	4.5	4.00	3.6	< 2.4	6.00	< 2.4	3.10

NPDES Permit Fact Sheet  
Walmar Manor MHP

NPDES Permit No. PA0080861

TSS (lbs/day) Average Monthly	1.6	2.52	1.1	1.3	1.1	2.00	0.6	1.1	0.35	1.2	1.3	2.18
TSS (lbs/day) Weekly Average	2.2	2.79	1.1	1.5	2.0	2.22	0.6	1.3	0.41	1.6	2.3	2.84
TSS (mg/L) Average Monthly	7.5	13.5	8.0	6.5	7.0	8.0	2.5	3.5	2.5	8.00	10.0	14.0
TSS (mg/L) Weekly Average	8.0	15.0	9.0	9.0	13.0	9.0	3.0	4.0	3.0	8.00	15.0	17.0
Fecal Coliform (No./100 ml) Geometric Mean	< 1	23	< 2	11	1	64	2	14	5	< 9	> 702	55
Fecal Coliform (No./100 ml) Instantaneous Maximum	2	39	4	13	2	205	5	16	12	82	> 2420	96
Nitrate-Nitrite (mg/L) Average Monthly	< 36.40	< 27.90	< 26.90	< 21.40	< 8.56	8.26	8.87	< 15.40	< 17.20	< 30.90	< 40.40	< 31.40
Nitrate-Nitrite (lbs) Total Monthly	< 249.09	< 161.63	< 109.25	< 148.27	< 47.36	70.90	59.66	< 142.34	< 76.42	< 132.62	< 119.28	< 142.17
Total Nitrogen (mg/L) Average Monthly	< 36.90	< 28.40	< 27.40	< 22.40	< 19.66	14.96	15.27	< 16.20	< 22.25	< 31.75	< 40.90	< 31.98
Total Nitrogen (lbs) Total Monthly	< 252.45	< 164.53	< 111.28	< 154.23	< 105.99	123.05	107.96	< 150.11	< 97.89	< 135.69	< 120.76	< 144.79
Total Nitrogen (lbs) Total Annual												< 1478
Ammonia (lbs/day) Average Monthly	< 0.021	< 0.02	< 0.014	< 0.03	1.60	1.20	1.38	< 0.16	< 0.62	< 0.014	< 0.01	< 0.015
Ammonia (mg/L) Average Monthly	< 0.10	< 0.10	< 0.10	< 0.10	9.15	4.90	5.25	< 0.50	< 4.50	< 0.10	< 0.10	< 0.10
Ammonia (mg/L) Instantaneous Maximum	< 0.10	< 0.10	< 0.10	< 0.10	11.00	5.90	7.60	0.90	8.90	< 0.10	< 0.10	< 0.10
Ammonia (lbs) Total Monthly	< 0.65	< 0.58	< 0.41	< 0.78	48.11	37.23	39.95	< 5.09	< 19.08	< 0.43	< 0.38	< 0.46
Ammonia (lbs) Total Annual												< 103
TKN (mg/L) Average Monthly	< 0.50	< 0.50	< 0.50	< 1.00	11.10	6.70	6.40	< 0.80	< 5.05	< 0.85	< 0.50	< 0.58
TKN (lbs) Total Monthly	< 3.36	< 2.90	< 2.03	< 5.96	58.63	52.15	48.31	< 7.77	< 21.47	< 3.07	< 1.48	< 2.62
Total Phosphorus (lbs/day) Average Monthly	0.34	0.39	0.25	0.22	0.35	0.29	0.21	0.33	0.16	0.21	0.41	0.15

**NPDES Permit Fact Sheet**  
**Walmar Manor MHP**

**NPDES Permit No. PA0080861**

Total Phosphorus (mg/L) Average Monthly	1.80	2.1	1.85	1.05	1.90	1.15	0.84	1.09	1.12	1.50	3.15	1.04
Total Phosphorus (mg/L) Instantaneous Maximum	2.4	2.4	1.90	1.40	2.00	1.20	1.00	1.30	1.40	1.60	3.9	1.50
Total Phosphorus (lbs) Total Monthly	10.51	12.16	7.52	6.89	10.37	9.08	6.05	10.34	4.84	6.31	12.72	4.55
Total Phosphorus (lbs) Total Annual												59

**Compliance History**

**Effluent Violations for Outfall 001, from: October 1, 2023 To: August 31, 2024**

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	10/31/23	Geo Mean	> 702	No./100 ml	2000	No./100 ml
Fecal Coliform	10/31/23	IMAX	> 2420	No./100 ml	10000	No./100 ml
Total Phosphorus	07/31/24	Avg Mo	2.1	mg/L	2.0	mg/L
Total Phosphorus	10/31/23	Avg Mo	3.15	mg/L	2.0	mg/L

Summary of Inspections: The facility is currently under a Consent Order and Agreement to upgrade the existing WWTP. A WQM amendment was submitted on March 28, 2024.

**Development of Effluent Limitations**

Outfall No. 001  
Latitude 40° 3' 33.58"  
Wastewater Description: Sewage Effluent

Design Flow (MGD) .0375  
Longitude -77° 3' 37.36"

**Technology-Based Limitations**

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
CBOD <sub>5</sub>	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (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.

Weekly limits currently exist for BOD5 and TSS. In conformity with SOP No. BCW-PMT-033, which states, "weekly average limits for CBOD5 and TSS will not be imposed where the sampling frequency is less than 1/week," weekly limits have been removed from the renewed permit. No change is proposed to the average monthly or peak instantaneous limits.

***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 0.27 mg/L (average monthly) and 0.89 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 Nitrogen for all sewage facilities. Therefore, a routine monitoring for TKN, Nitrate-Nitrite, and TN are recommended to be continued in this permit as previously permitted.

Historically, an average monthly Total Phosphorus limit of 2.0 mg/L was recommended in NPDES permits, per DEP phosphorus guidance 391-2000-018, to control phosphorus effluent levels for any facilities that are expected to contribute 0.25% or more of the total phosphorus loading of the entire basin. DEP has previously determined that this facility meets the criteria and the limit has been continuously imposed in the permit. It is recommended to maintain this limit in the draft permit.

## **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 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, 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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> 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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
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	0.27	XXX	0.89	1/day	Grab
CBOD5	Report	XXX	XXX	25.0	XXX	50	2/month	8-Hr Composite
TSS	Report	XXX	XXX	30.0	XXX	60	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/year	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	10.5	XXX	21.0	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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Ammonia May 1 - Oct 31	Report	XXX	XXX	3.5	XXX	7.0	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	2.0	XXX	4.0	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	
<input checked="" type="checkbox"/>	WQM for Windows Model (see Attachment [REDACTED])
<input type="checkbox"/>	Toxics Management Spreadsheet (see Attachment [REDACTED])
<input checked="" type="checkbox"/>	TRC Model Spreadsheet (see Attachment [REDACTED])
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment [REDACTED])
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input checked="" type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input checked="" type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input type="checkbox"/>	SOP: [REDACTED]
<input type="checkbox"/>	Other: [REDACTED]



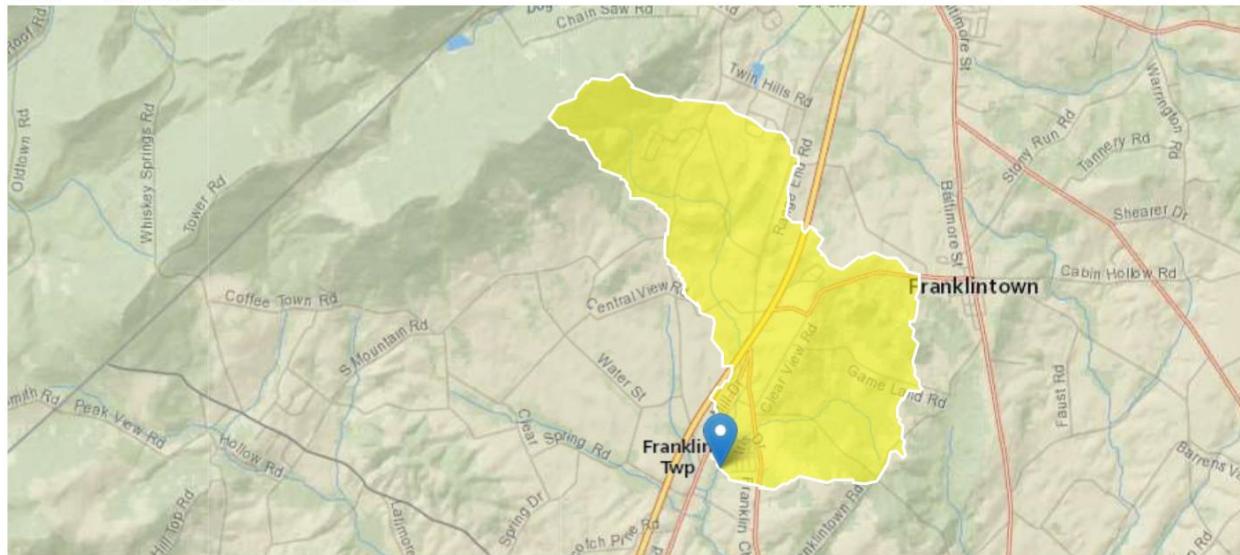
## StreamStats Report

Region ID: PA

Workspace ID: PA20241023113746041000

Clicked Point (Latitude, Longitude): 40.05975, -77.06025

Time: 2024-10-23 07:38:08 -0400



✖ [Collapse All](#)

### ► Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	4.7337	degrees
DRNAREA	Area that drains to a point on a stream	3.14	square miles
ROCKDEP	Depth to rock	4.8	feet
URBAN	Percentage of basin with urban development	1.0504	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	3.14	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	4.7337	degrees	1.7	6.4
ROCKDEP	Depth to Rock	4.8	feet	4.13	5.21
URBAN	Percent Urban	1.0504	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	0.674	ft^3/s
30 Day 2 Year Low Flow	0.871	ft^3/s
7 Day 10 Year Low Flow	0.302	ft^3/s
30 Day 10 Year Low Flow	0.406	ft^3/s
90 Day 10 Year Low Flow	0.632	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/>)**

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Application Version: 4.24.0

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

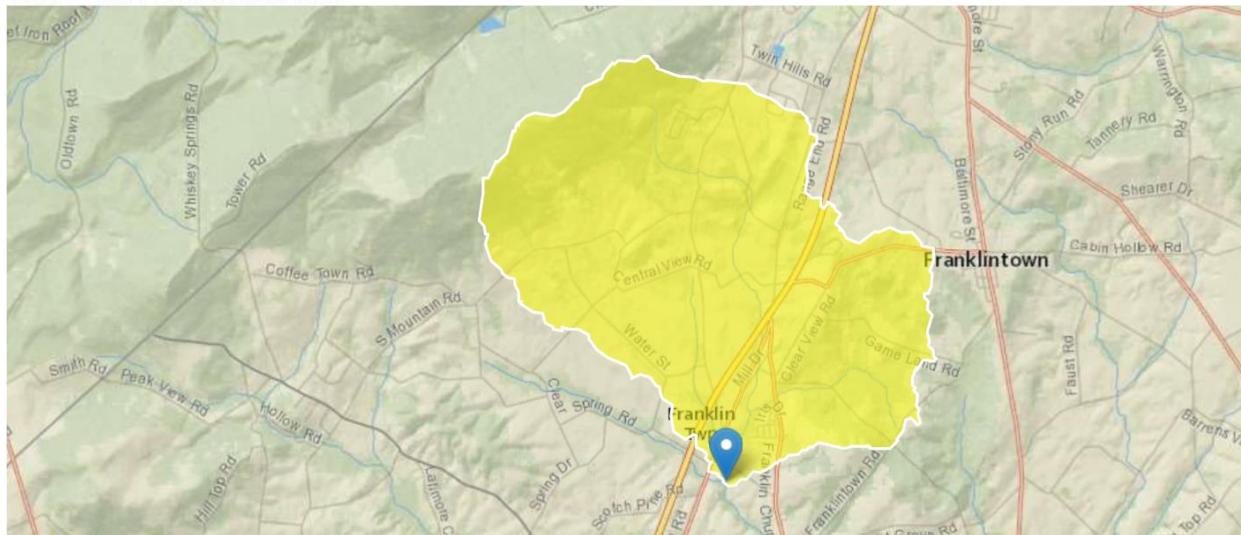
## StreamStats Report

Region ID: PA

Workspace ID: PA20241023114606692000

Clicked Point (Latitude, Longitude): 40.05502, -77.06240

Time: 2024-10-23 07:46:28 -0400



[Collapse All](#)

### » Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	4.8728	degrees
DRNAREA	Area that drains to a point on a stream	5.63	square miles
ROCKDEP	Depth to rock	4.8	feet
URBAN	Percentage of basin with urban development	0.5987	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	5.63	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	4.8728	degrees	1.7	6.4
ROCKDEP	Depth to Rock	4.8	feet	4.13	5.21
URBAN	Percent Urban	0.5987	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<sup>2</sup>: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	1.25	ft <sup>3</sup> /s	46	46
30 Day 2 Year Low Flow	1.59	ft <sup>3</sup> /s	38	38
7 Day 10 Year Low Flow	0.579	ft <sup>3</sup> /s	51	51
30 Day 10 Year Low Flow	0.764	ft <sup>3</sup> /s	46	46
90 Day 10 Year Low Flow	1.16	ft <sup>3</sup> /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/>)**

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Application Version: 4.24.0

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

TRC\_CALC

1A	B	C	D	E	F	G				
<b>2 TRC EVALUATION</b>										
3 Input appropriate values in B4:B8 and E4:E7										
4	0.302	= Q stream (cfs)		0.5	= CV Daily					
5	0.0375	= 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	0.27	= BAT/BPJ Value		720	= CFC_Criteria Compliance Time (min)					
	0	= % Factor of Safety (FOS)			=Decay Coefficient (K)					
10	Source	Reference	AFC Calculations	Reference	CFC Calculations					
11	TRC	1.3.2.iii	WLA_afc = 1.680	1.3.2.iii	WLA_cfc = 1.630					
12	PENTOXSD TRG	5.1a	LTAMULT_afc = 0.373	5.1c	LTAMULT_cfc = 0.581					
13	PENTOXSD TRG	5.1b	LTA_afc = 0.626	5.1d	LTA_cfc = 0.948					
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) = 0.270			BAT/BPJ				
18			INST MAX LIMIT (mg/l) = 0.883							
19										
20	WLA_afc	$(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))...\\...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)$								
21	LTAMULT_afc	$EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)$								
22	LTA_afc	$wla_afc*LTAMULT_afc$								
23	WLA_cfc	$(.011/e(-k*CFC_tc)) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))...\\...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)$								
24	LTAMULT_cfc	$EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)$								
25	LTA_cfc	$wla_cfc*LTAMULT_cfc$								
26	AML MULT	$EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))$								
27	AVG MON LIMIT	$MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)$								
28	INST MAX LIMIT	$1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)$								

**WQM 7.0 Effluent Limits**

<b>SWP Basin</b>	<b>Stream Code</b>	<b>Stream Name</b>					
07F	8640	NORTH BRANCH BERMUDIAN CREEK					
RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
9.020	Walmar MHP	PA0080861	0.038	CBOD5	25		
				NH3-N	3.5	7	
				Dissolved Oxygen			5

## WQM 7.0 Wasteload Allocations

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>
07F	8640	NORTH BRANCH BERMUDIAN CREEK

## NH3-N Acute Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
9.020	Walmar MHP	11.07	7	11.07	7	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
9.020	Walmar MHP	1.37	3.5	1.37	3.5	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)		
9.02	Walmar MHP	25	25	3.5	3.5	5	5	0	0

**WQM 7.0 D.O.Simulation**

<b><u>SWP Basin</u></b>	<b><u>Stream Code</u></b>	<b><u>Stream Name</u></b>		
<b>07F</b>	<b>8640</b>	<b>NORTH BRANCH BERMUDIAN CREEK</b>		
<u>RMI</u>	<u>Total Discharge Flow (mgd)</u>		<u>Analysis Temperature (°C)</u>	<u>Analysis pH</u>
9.020	0.038		25.000	7.000
<u>Reach Width (ft)</u>	<u>Reach Depth (ft)</u>		<u>Reach WDRatio</u>	<u>Reach Velocity (fps)</u>
9.407	0.440		21.401	0.087
<u>Reach CBOD5 (mg/L)</u>	<u>Reach Kc (1/days)</u>		<u>Reach NH3-N (mg/L)</u>	<u>Reach Kn (1/days)</u>
5.71	0.964		0.56	1.029
<u>Reach DO (mg/L)</u>	<u>Reach Kr (1/days)</u>		<u>Kr Equation</u>	<u>Reach DO Goal (mg/L)</u>
7.720	21.782		Owens	6
<u>Reach Travel Time (days)</u>	<b><u>Subreach Results</u></b>			
0.302	TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
	0.030	5.50	0.55	7.54
	0.060	5.30	0.53	7.54
	0.091	5.11	0.51	7.54
	0.121	4.93	0.50	7.54
	0.151	4.75	0.48	7.54
	0.181	4.58	0.47	7.54
	0.211	4.42	0.45	7.54
	0.241	4.26	0.44	7.54
	0.272	4.10	0.43	7.54
	0.302	3.96	0.41	7.54

## WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	<input checked="" type="checkbox"/>
WLA Method	EMPR	Use Inputted W/D Ratio	<input type="checkbox"/>
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	<input type="checkbox"/>
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	<input checked="" type="checkbox"/>
D.O. Saturation	90.00%	Use Balanced Technology	<input checked="" type="checkbox"/>
D.O. Goal	6		

**WQM 7.0 Hydrodynamic Outputs**

<u>SWP Basin</u>			<u>Stream Code</u>			<u>Stream Name</u>							
07F			8640			NORTH BRANCH BERMUDIAN CREEK							
RMI	Stream Flow	PWS With	Net Stream Flow	Disc Analysis	Reach Slope	Depth	Width	W/D Ratio	Velocity	Reach Trav Time	Analysis Temp	Analysis pH	
	(cfs)	(cfs)	(cfs)	(cfs)	(ft/ft)	(ft)	(ft)		(fps)	(days)	(°C)		
<b>Q7-10 Flow</b>													
9.020	0.30	0.00	0.30	.058	0.00251	.44	9.41	21.4	0.09	0.302	25.00	7.00	
<b>Q1-10 Flow</b>													
9.020	0.19	0.00	0.19	.058	0.00251	NA	NA	NA	0.07	0.369	25.00	7.00	
<b>Q30-10 Flow</b>													
9.020	0.41	0.00	0.41	.058	0.00251	NA	NA	NA	0.10	0.260	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				
07F	8640	NORTH BRANCH BERMUDIAN CRE		9.020	517.64	3.14	0.00000	0.00	<input checked="" type="checkbox"/>				
<b>Stream Data</b>													
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)	Stream Temp (°C)	Stream pH		
Q7-10	0.100	0.00	0.30	0.000	0.000	0.0	0.00	0.00	25.00	7.00	0.00		
Q1-10		0.00	0.00	0.000	0.000								
Q30-10		0.00	0.00	0.000	0.000								
<b>Discharge Data</b>										Disc Temp (°C)	Disc pH		
Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor								
Walmar MHP	PA0080861	0.0375	0.0375	0.0375	0.000	25.00	7.00						
<b>Parameter Data</b>													
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	3.50	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
07F	8640	NORTH BRANCH BERMUDIAN CRE			8.590	511.93	5.63	0.00000	0.00	<input checked="" type="checkbox"/>
<b>Stream Data</b>										
<b>Design Cond.</b>	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)	Stream Temp (°C)
<b>Q7-10</b> 0.100 0.00 0.58 0.000 0.000 0.0 0.00 0.00 25.00 7.00 0.00 0.00 <b>Q1-10</b> 0.00 0.00 0.000 0.000 <b>Q30-10</b> 0.00 0.00 0.000 0.000										
<b>Discharge Data</b>										
		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										
<b>Parameter Data</b>										
			Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)			
CBOD5 Dissolved Oxygen NH3-N				25.00	2.00	0.00	1.50			
				3.00	8.24	0.00	0.00			
				25.00	0.00	0.00	0.70			