

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0112305
APS ID 986199
Authorization ID 1261168

Applicant and Facility Information

Applicant Name	<u>Wyalusing Municipal Authority</u>	Facility Name	<u>Wyalusing Municipal Authority Sewer System STP</u>
Applicant Address	<u>PO Box 131 50 Senate Street</u> <u>Wyalusing, PA 18853-0131</u>	Facility Address	<u>River Street</u> <u>Wyalusing, PA 18853</u>
Applicant Contact	<u>Chris Woodruff</u>	Facility Contact	<u>Steve Campbell</u>
Applicant Phone	<u>(570) 746-1707</u>	Facility Phone	<u>(570) 746-9041</u>
Client ID	<u>85808</u>	Site ID	<u>245372</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Wyalusing Borough</u>
Connection Status	<u>No Limitations</u>	County	<u>Bradford</u>
Date Application Received	<u>February 7, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>February 20, 2019</u>	If No, Reason	<u></u>
Purpose of Application	<u>Application for the renewal of the existing individual NPDES permit.</u>		

Summary of Review

Wyalusing Municipal Authority has submitted an application for the renewal of the existing NPDES Permit PA0112305 for the Department's review. 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		Jonathan P. Peterman / Project Manager	December 24, 2019
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.13</u>
Latitude	<u>41° 39' 48.38"</u>	Longitude	<u>-76° 16' 10.10"</u>
Quad Name	<u>Wyalusing</u>	Quad Code	<u>0535</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Susquehanna River (WWF)</u>	Stream Code	<u>06685</u>
NHD Com ID	<u>66403775</u>	RMI	<u>253.3</u>
Drainage Area	<u>8259.66</u>	Yield (cfs/mi ²)	<u>0.0743</u>
Q ₇₋₁₀ Flow (cfs)	<u>613.79</u>	Q ₇₋₁₀ Basis	<u>Stream gage no. 1533400</u>
Elevation (ft)	<u>639</u>	Slope (ft/ft)	<u>0.0003</u>
Watershed No.	<u>4-D</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use	<u>WWF</u>	Existing Use Qualifier	<u>N/A</u>
Exceptions to Use	<u>None.</u>	Exceptions to Criteria	<u>N/A</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>MERCURY, POLYCHLORINATED BIPHENYLS (PCBS)</u>		
Source(s) of Impairment	<u>SOURCE UNKNOWN, SOURCE UNKNOWN</u>		
TMDL Status	<u>Final</u>	Name	<u>Susquehanna River PCB</u>
Nearest Downstream Public Water Supply Intake	<u>Danville Municipal Water Authority</u>		
PWS Waters	<u>North Branch Susquehanna River</u>	Flow at Intake (cfs)	<u>1010</u>
PWS RMI	<u>138.06</u>	Distance from Outfall (mi)	<u>115.24</u>

Changes Since Last Permit Issuance: The updated Q₇₋₁₀ data was obtained from the updated stream gage information obtained from *Stuckey, M.H., and Roland, M.A., 2011, Selected Streamflow Statistics for Streamgage Locations In and Near Pennsylvania*. This report indicates that the Q₇₋₁₀ is 648 cfs. Given that the associated stream gage (1533400) is located downstream of the discharge location, a simple comparative stream analysis is needed. This analysis reveals that the Q₇₋₁₀ is 613.79 cfs. Q₇₋₁₀ calculations are attached in Appendix A.

Other Comments: None.

Treatment Facility Summary				
Treatment Facility Name: Wyalusing Municipal Authority				
WQM Permit No.	Issuance Date	Comments		
0871401	6/18/2013	Rerate Design Capacity from 0.1 to 0.13 MDG and Organic Design Capacity from 170 to 250 lb BOD/day.		
0871401	3/29/1985	Construction of existing system.		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	No Disinfection	0.13
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.13	250	Not Overloaded	Aerobic Digestion	Landfill

Treatment System Components:

- One (1) Communitor.
- Two (2) Extended Aeration Tanks.
 - Three (3) Blowers.
- Two (2) Clarifiers.
- Two (2) Sand Filters.
- One (1) Tablet Erosion Chlorine Disinfection System.
- Two (2) Chlorine Contact Tanks.
- One (1) Flow Meter.
- One (1) Outfall 001.
- One (1) Sludge Holding Tank.
- One (1) Drying Bed.

Changes Since Last Permit Issuance: None.
 Other Comments: None.

TMDL Impairment

Susquehanna River PCB

The pollutants that are the causes for the designated use impairments in the Susquehanna River have been identified as organic Polychlorinated Biphenyls (PCBs). It is now illegal to manufacture, distribute, or use PCB in the United States. It is believed that the PCBs present in the Susquehanna River reside primarily in the sediment due to historic use. The main source of the PCBs was introduced into the environment while their use was unrestricted. However, occasional releases still occur. In addition, some permitted discharges and Superfund sites contribute PCB to surface water. It can be determined that a facility of this type with the associated industrial users, would not be a source for PCBs. In accordance with 40 CFR §122.44(d)(1)(ii)&(iii), it can be determined that the effluent from this facility has no "Reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant." Therefore, the permit will not be required to contain effluent limits for PCB's. The TMDL stipulates that natural attenuation may be the best implementation method because it involves less habitat disturbance/destruction than active removal of contaminated sediments.

Chesapeake Bay Requirements

Since this facility's annual average design flow is 0.13 MGD, the permittee will be required to monitor and report TN and TP throughout the permit term at a frequency no less than annually in accordance with the Phase II WIP Chesapeake Bay Strategy for Phase V facilities (0.002 MGD to 0.2 MGD) unless 1) the facility has already conducted at least two years of nutrient monitoring and 2) a summary of the monitoring results are included in the next permit's fact sheet. The previous permit contained the Chesapeake Bay Monitoring requirements and the required sampling has been conducted. Since the permittee conducted this monitoring in the previous permit term and the data is summarized in the fact sheet below, the conditions have been met and Chesapeake Bay monitoring will no longer be required.

Chesapeake Bay – eDMR Monitoring Results (2017 to 2019)

Date	Total Nitrogen (Annual Avg.)		Total Phosphorus (Annual Avg.)	
	(mg/L)	(lbs/day)	(mg/L)	(lbs/day)
2017	41.49	21.8	4.45	2.3
2018	41.1	30.8	4.95	3.72
2019	< 38.5	< 21.5	3.10	1.73

Anti-Backsliding

In accordance with 40 CFR 122.44(l)(1) and (2), this permit does not contain effluent limitations, standards, or conditions that are less stringent than the previous permit.

Trucked-In Waste

The application indicates that the facility does not receive hauled-in wastes.

Existing Effluent Limitations and Monitoring Requirements

Existing Limits – Outfall 001

Discharge Parameter	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
	Monthly Average	Daily Maximum	Minimum	Average Monthly	Average Weekly	Instantaneous Maximum	Minimum Frequency	Sample Type
Flow (MGD)	Report	Report					Continuous	Measured
C-BOD ₅	21	33		25	40	50	1/ Week	8-Hr. Comp.
BOD ₅ Raw Sewage Influent	Report	Report		Report			1/ Week	8-Hr Comp
TSS	25	38		30	45	60	1/ Week	8-Hr. Comp.
TSS Raw Sewage Influent	Report	Report		Report			1/ Week	8-Hr Comp
TRC				1.0		2.3	1/ Day	Grab
NH ₃ -N				Report		Report	2/ Month	Grab
D.O.				Report			1/ Day	Grab
pH (Std. Units)			6.0			9.0	1/ Day	Grab
Fecal Coliforms (5/1-9/30)	200 colonies/100 ml as a geometric mean					1,000	2/ Month	Grab
Fecal Coliforms (10/1-4/30)	2,000 colonies/100 ml as a geometric mean					10,000		
Total Nitrogen	Report Annual Average	Report Total Annual		Report Annual Average			1/ Year	Grab
Total Phosphorous	Report Annual Average	Report Total Annual		Report Annual Average			1/ Year	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 0.13 MGD.

Development of Effluent Limitations

Outfall No.	001	Design Flow (MGD)	0.13
Latitude	41° 39' 50.70"	Longitude	-76° 16' 7.90"
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)

Water Quality-Based Limitations

To establish whether or not water-quality based effluent limitations (WQBELs) are required, the Department models in-stream conditions. In order to determine limitations for CBOD₅, ammonia-N and dissolved oxygen, the Department utilizes the WQM 7.0 v1.0b model and in order to determine limitations for toxics, the Department utilizes the PENTOXSD v2.0d model.

WQM 7.0 for Windows, Version 1.0b, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen

Since there have been no changes to the watershed or the facility, the previous modeling results shall be utilized. The model was previously run using the Q7-10 stream flow, background water quality, average annual design flow, and other discharge characteristics. The existing water technology-based effluent limits for CBOD₅ (25 mg/l) and NH₃-N (25 mg/l) were used as inputs for the modeling. The DO minimum daily average criterion from §93.7 (5.0 mg/L for WWF) was used for the in-stream objective for the model. The summary of the output is as follows:

Parameter	Effluent Limit		
	30 Day Average	Maximum	Minimum
CBOD ₅	25	N/A	N/A
Ammonia-N	25	50	N/A
Dissolved Oxygen	N/A	N/A	3

The previous model did not recommend more stringent water-quality based effluent limitations with regards to CBOD₅, ammonia-nitrogen, and dissolved oxygen. Refer to the Appendix for the previous WQM 7.0 inputs and results. The existing effluent limits will remain.

Best Professional Judgment (BPJ) Limitations

See D.O. section below.

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 the abovementioned technology, water quality, and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001) and/or BPJ.

Proposed Limits - Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date

Discharge Parameter	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
	Monthly Average	Daily Maximum	Minimum	Average Monthly	Average Weekly	Instantaneous Maximum	Minimum Frequency	Sample Type
Flow (MGD)	Report	Report					Continuous	Measured
C-BOD ₅	21	33		25	40	50	1/ Week	8-Hr. Comp.
BOD ₅ Raw Sewage Influent	Report	Report		Report			1/ Week	8-Hr Comp
TSS	25	38		30	45	60	1/ Week	8-Hr. Comp.
TSS Raw Sewage Influent	Report	Report		Report			1/ Week	8-Hr Comp
TRC				0.5		1.6	1/ Day	Grab
NH ₃ -N				Report		Report	2/ Month	Grab
D.O.				Report			1/ Day	Grab
pH (Std. Units)			6.0			9.0	1/ Day	Grab
Fecal Coliforms (5/1-9/30)	200 colonies/100 ml as a geometric mean					1,000	2/ Month	Grab
Fecal Coliforms (10/1-4/30)	2,000 colonies/100 ml as a geometric mean					10,000		

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.13 MGD.

Effluent Limit Determination for Outfall 001

General Information

All of the limits proposed above are consistent with other permits issued for Phase III wastewater treatment plants in the region. The associated mass-based limits (lbs/day) for all parameters were based on the formula: design flow (average annual) (MGD) x concentration limit (mg/L) at design flow x conversion factor (8.34). All effluent limits were then rounded down in accordance with the rounding rules established in the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001), Chapter 5 - Specifying Effluent Limitations in NPDES Permits.

Flow

The existing monitoring frequency (Continuous) and sample type (Meter) for Flow correspond with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3. Reporting of the daily maximum flow is consistent with monitoring requirements for other treatment plants of this size.

Carbonaceous Biochemical Oxygen Demand (CBOD₅)

The results of the WQM 7.0 model show that the previously applied secondary treatment standards (25 PA Code §92a.47 (a) (1&2)) for CBOD₅ are protective of water quality. The existing monitoring frequency (1/ Week) and sample type (8-hr composite) for CBOD₅ correspond with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3 and will remain.

Total Suspended Solids (TSS)

The previously applied technology based secondary treatment standards (25 PA Code §92a.47 (a) (1&2)) for TSS will remain as well. The existing monitoring frequency (1/ Week) and sample type (8-hr composite) for TSS correspond with

the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3 and will remain.

pH

CFR Title 40 §133.102(c) and 25 PA Code §95.2(1) provide the basis of effluent limitations for pH. The existing monitoring sample type (Grab) for pH corresponds with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3 and will remain. The existing monitoring frequency (1/ Day) corresponds with this guidance.

Fecal Coliforms

The existing fecal coliform limits with I-max limits were updated from the previous Chapter 92 code to correspond with what is specified in the updated 25 PA Code § 92a.47 (a)(4)&(5). The existing monitoring frequency (2/ Month) and sample type (Grab) for Fecal Coliforms correspond with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3 and will remain.

Total Residual Chlorine (TRC)

In accordance with 25 Pa. Code 92a.48(b)(2), a best available technology (BAT) value of 0.5 mg/l was used in lieu of the existing effluent limit (1.0 mg/L) in the TRC Spreadsheet. The attached TRC model indicates that the technology based effluent limits of 0.5 mg/L (Average Monthly) and 1.6 mg/L (Instantaneous Maximum) are protective of water quality. The facility currently utilizes tablet chlorination as a disinfection method. It has been proven that this method, if operated properly and maintained, can effectively and consistently meet these effluent requirements. The existing sample type (grab) for TRC correspond with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3 and will remain.

As stated above, 25 PA Code § 92a.48(b)(2) provides a BAT limit of 0.5 mg/L unless a site-specific study has been conducted. Given that a site-specific TRC study has not been provided for this facility, the BAT limit will be established. Historical DMR data from the previous year was reviewed to determine if the facility will require a compliance schedule to comply with the proposed effluent limits. The DMR results are listed in the compliance review below.

Based on the data, it appears that the facility can currently meet the proposed TRC effluent limits (0.50 mg/L and 1.6 mg/l) on a majority basis. Therefore, the permit will not require a 2-year compliance schedule in order for the facility to comply with the decreased limits. The effluent limits will be added to the draft permit.

Ammonia-Nitrogen (NH3-N)

The previous WQM 7.0 modeling results for NH3-N indicate that an average monthly limit of 25 mg/L would be protective of water quality. However, a year-round monitoring requirement was previously established for ammonia-nitrogen and the results of this monitoring indicate that the discharge concentration is relatively low, and an effluent limit is not required. The existing monitoring requirement will remain. The existing monitoring frequency (1/ Week) and sample type (8-Hr. Composite) for NH3-N corresponds with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3 and will remain.

Dissolved Oxygen (DO)

Given results of the WQM 7.0 model, a discharge of effluent from this facility with a DO concentration of 3 mg/l would not result in an exceedance of water quality requirements for this stream. However, the Department previously established a monitor only requirement. The monitoring requirement was established to ensure that the facility's discharge does not cause or contribute to an in-stream excursion below water quality standards for DO in the receiving stream. The results of this monitoring indicate that the discharge concentration is significantly higher than the minimum requirement, and an effluent limit is not required. The existing monitoring requirement will remain. A sample type (Grab) and monitoring frequency (1/ Day) for DO will be implemented to correspond with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3.

Influent BOD₅ and TSS

The Department requires the reporting of raw sewage influent monitoring for BOD₅ and TSS in all POTW permits. This provides the Department with the ability to monitor the percent removal of each parameter as stipulated in section 2 of the Part A conditions and maintain records of the BOD₅ loading as required by 25 Pa. Code Chapter 94. The monitoring frequencies and sample types are identical to the effluent sampling.

Other Comments: All effluent limits are appropriate and typical for this facility type.

Compliance History

Summary of Inspections - The last inspection of the facilities was conducted on 9/17/19 by Department. The inspection report indicates that the facility was operating normally, and no violations were noted that this time.

WMS Query Summary - A WMS Query was run at *Reports - Violations & Enforcements – Open Violations for Client Report* to determine whether there are any unresolved violations associated with the client that will affect issuance of the permit (per CSL Section 609). This query revealed no open violations.

DMRs Summary - Upon review of the DMR's, the facility has been in compliance with the existing effluent limits except one minor exceedance listed below (See list of violations below).

Attachments



Wyalusing
Appendices

Compliance History

DMR Data for Outfall 001 (from November 1, 2018 to October 31, 2019)

Parameter	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18
Flow (MGD) Average Monthly	0.050	0.050	0.046	0.054	0.079	0.087	0.081	0.079	0.087	0.094	0.082	0.101
Flow (MGD) Daily Maximum	0.087	0.082	0.070	0.099	0.206	0.142	0.127	0.123	0.120	0.186	0.109	0.157
pH (S.U.) Minimum	7.21	7.16	7.14	7.10	7.15	7.08	7.00	7.04	7.16	7.21	7.23	7.26
pH (S.U.) Maximum	8.03	7.55	7.34	7.58	7.49	7.81	7.45	7.40	7.55	7.50	7.56	7.56
DO (mg/L) Minimum	7.25	7.38	6.1	5.6	6.1	7.3	8.1	7.6	7.4	7.5	8.3	7.5
TRC (mg/L) Average Monthly	0.40	0.45	0.46	0.43	0.60	0.61	0.49	0.22	0.38	0.41	0.40	0.34
TRC (mg/L) Instantaneous Maximum	0.94	1.03	1.01	0.97	2.1	1.84	1.87	0.65	1.04	0.84	1.28	1.07
CBOD5 (lbs/day) Average Monthly	< 1	< 2	< 2	1	< 1.3	2.9	1.9	2	2.72	2.2	1.4	1.7
CBOD5 (lbs/day) Weekly Average	< 1	< 2	< 2	1	< 1.3	2.9	1.9	2	2.72	2.2	1.4	2.0
CBOD5 (mg/L) Average Monthly	2.2	< 2	< 2	< 2	< 2	4	2.5	3.5	3.75	2.8	2	< 2
CBOD5 (mg/L) Weekly Average	2.2	< 2	< 2	< 2	< 2	4	2.5	3.5	3.75	2.8	2	< 2
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	112	111	145	99	178	168	191	186	153	232	137	376
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	232	134	173	123	207	218	297	227	264	390	181	871
BOD5 (mg/L) Raw Sewage Influent Average Monthly	305	201	295	197	232	212	239	304	281	262	189	315
TSS (lbs/day) Average Monthly	1.5	< 3	< 3	1.4	2.47	2.3	2.2	2.5	2.54	2.5	2.4	2.5

**NPDES Permit Fact Sheet
Wyalusing Municipal Authority Sewer System STP**

NPDES Permit No. PA0112305

TSS (lbs/day) Raw Sewage Influent Average Monthly	140	89	136	110	135	140	157	119	119	270	115	262
TSS (lbs/day) Raw Sewage Influent Daily Maximum	171	114	171	123	186	165	262	146	145	687	130	677
TSS (lbs/day) Weekly Average	1.5	< 3	< 3	1.4	2.47	2.3	2.2	2.5	2.54	2.5	2.3	3.0
TSS (mg/L) Average Monthly	3.6	< 4	< 3	< 3	3.75	3.2	2.2	3.75	3.5	3.2	3.5	< 3
TSS (mg/L) Raw Sewage Influent Average Monthly	252	161	278	214	169	176	194	193	176	300	160	211
TSS (mg/L) Weekly Average	3.6	< 4	< 3	< 3	3.75	3.2	2.5	3.75	3.5	3.2	3.5	< 3
Fecal Coliform (CFU/100 ml) Geometric Mean	2.09	1.58	1	6.3	1.4	3	5.9	52	30.6	42.5	19	8.3
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	20	4	1	1553	4	10	52	2420	135	> 2420	435	10
Total Nitrogen (lbs/day) Annual Average												< 21.5
Total Nitrogen (mg/L) Annual Average												< 38.5
Total Nitrogen (lbs) Total Annual												< 21.5
Ammonia (mg/L) Average Monthly	4.1	0.16	0.15	0.13	0.11	0.11	< 0.10	0.33	5.23	0.16	0.13	0.14
Ammonia (mg/L) Instantaneous Maximum	6.6	0.17	0.15	0.15	0.11	0.11	< 0.10	0.50	6.2	0.16	0.15	0.14
Total Phosphorus (lbs/day) Annual Average												1.73
Total Phosphorus (mg/L) Annual Average												3.10
Total Phosphorus (lbs) Total Monthly												1.73

Compliance History

Effluent Violations for Outfall 001, from: December 1, 2018 To: October 31, 2019

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	07/31/19	IMAX	1553	CFU/100 ml	1000	CFU/100 ml

Tools and References Used to Develop Permit	
<input checked="" type="checkbox"/>	Q7-10 Analysis and Stream Data (see Appendix A)
<input checked="" type="checkbox"/>	WQM 7.0 Model Input/Output (see Appendix B)
<input type="checkbox"/>	Toxics Screening Analysis v2.4 (see Appendix)
<input type="checkbox"/>	PENTOXSD v2.0d Model Input/Output (see Appendix)
<input checked="" type="checkbox"/>	Facility Map and Schematic (see Appendix D)
<input checked="" type="checkbox"/>	TRC Evaluation Spreadsheet (see Appendix C)
<input type="checkbox"/>	Lake Model Output (see Appendix)
<input type="checkbox"/>	WETT Spreadsheet (see Appendix)
<input checked="" 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, 362-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 385-2000-011, 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, 391-2000-002, 4/97.
<input checked="" type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
<input checked="" type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
<input checked="" type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
<input checked="" type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 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, 391-2000-019, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 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, 391-2000-022, 3/1999.
<input checked="" type="checkbox"/>	Design Stream Flows, 391-2000-023, 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, 391-2000-024, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
<input checked="" type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
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<input type="checkbox"/>	Other: