pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0086461**
Facility Type	**Non-Municipal**	APS ID	**277818**
Major / Minor	**Minor**	Authorization ID	**1209747**

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Pinch Pond Campground Inc.**	Facility Name	**Pinch Pond Campground**
Applicant Address	3075 Pinch Road	Facility Address	3075 Pinch Road
	Manheim, PA 17545		Manheim, PA 17545
Applicant Contact	Jason Sheaffer	Facility Contact	Jason Sheaffer
Applicant Phone	(717) 665-7640	Facility Phone	(717) 665-7640
Client ID	109	Site ID	444148
Ch 94 Load Status	Not Overloaded	Municipality	Rapho Township
Connection Status		County	Lancaster
Date Application Received	November 22, 2017	EPA Waived?	No
Date Application Accepted	March 27, 2018	If No, Reason	Chiques Creek Alternate TMDL
Purpose of Application	NPDES Renewal.		

Summary of Review

Pinch Pond Campground has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its National Pollutant Discharge Elimination System (NPDES) permit. The permit was issued on May 24, 2013 and became effective on June 1, 2013, authorizing discharge of treated sewage from the existing wastewater treatment plant (WWTP) located in Rapho Township, Lancaster County into Chiques Creek. The permit expired on May 31, 2018, and has been administratively extended since that time.

Per the previous fact sheet, Pinch Pond Campground is an existing facility with 5 permanent sites, 35 tent sites, and 115 campsites including toilets, showers, laundry facilities, and a pool that was served by approximately four septic tanks and drainfields. The drainfields became overloaded, which resulted in the owner installing a treatment plant, and adding an additional 20 campsites. A Dutchland sewage treatment plant was installed in June 1995. The stream site was evaluated, and is about five feet wide with riffles of a couple inches deep to pools of a foot deep. The stream velocity appeared to be average with some meandering of the stream which causes the pool reaches. The stream's substrate consists of a sandy/gravel mixture with little siltation. The stream is also rocky. This area is completely wooded.

Changes in this renewal: A more stringent ammonia limit was added to the permit. A Total Phosphorus limit was added to the permit.

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*,

Approve	Deny	Signatures	Date
		Benjamin R. Lockwood / Environmental Engineering Specialist	October 22, 2019
		Daniel W. Martin, P.E. / Environmental Engineer Manager	
		Maria D. Bebenek, P.E. / Program Manager	

Summary of Review
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. Supplemental information for this report is located in an attachment below:  Pinch Pond Campground WWTP

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.01725
Latitude	40º 13' 57"	Longitude	76º 26' 52"
Quad Name	Manheim	Quad Code	1734
Wastewater Description:	Sewage Effluent		
Receiving Waters	Chiques Creek (WWF, MF)	Stream Code	7919
NHD Com ID	57461967	RMI	29.1
Drainage Area	1.45 mi^2	Yield (cfs/mi^2)	0.12
Q_{7-10} Flow (cfs)	0.174	Q_{7-10} Basis	USGS Gage #01576500
Elevation (ft)	552	Slope (ft/ft)	
Watershed No.	7-G	Chapter 93 Class.	WWF, MF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	Siltation		
Source(s) of Impairment	Agriculture		
TMDL Status	N/A	Name	N/A
Nearest Downstream Public Water Supply Intake	Columbia Borough Water Company		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	31.3

Changes Since Last Permit Issuance: A drainage area of 1.45 mi^2 and a Q_{7-10} flow of 0.174 cubic feet per second (cfs) were determined by establishing a correlation to the yield of USGS Gage Station #01576500 on the Conestoga River. The Q_{7-10} and drainage area at the gage are 38.6 cfs and 324 mi^2, respectively. These values are taken from the USGS document "Selected Streamflow Statistics for Streamgage Locations in and near Pennsylvania". The Q_{7-10} runoff rate at the gage station was calculated as follows:

Yield = (38.6 cfs)/ 324 mi^2 = 0.12 cfs/mi^2

The drainage area at the discharge point, taken from USGS PA StreamStats = 1.45 mi^2

The Q_{7-10} at the discharge point = 1.45 mi^2 x 0.12 cfs/mi^2 = 0.174 cfs

Other Comments: None

Treatment Facility Summary				
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Secondary	Extended Aeration	Hypochlorite	0.01725
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.01725		Not Overloaded	Sludge Holding	Other WWTP

Changes Since Last Permit Issuance: None

Other Comments: The treatment plant process is as follows: Barscreen – Equalization Tank – Three (3) Aeration Tanks – Clarifier – Chlorine Contact Tank with Tablet Chlorination – Tablet Dechlorination – Post Settling and Post Aeration – Aerated Sludge Holding – Outfall 001 to Chiques Creek

Compliance History	
Summary of DMRs:	A summary of the past 12-month DMR effluent data is presented on the next page of this fact sheet.
Summary of Inspections:	7/18/2013: A routine inspection was conducted. Effluent was mostly clear with some visible floating sediment. Field test results for pH, D.O., and TRC were within their permitted range. The mixed liquor in the aeration tanks had moderate foam on the surface with good floc formation. The clarifier appeared to have good settling with some popping sludge on the surface. The clarifier weir was clear. There were some floating solids in the final tank. The outfall area was inspected, and no issues were noted. 6/30/2014: An inspection was conducted. A NOV was issued in January 2014 due to DMR deficiencies. The plant operation looked good. Thick foam was present on the second aeration tank. Some floating solids were present in the chlorine contact tank and final tank. Field test results were within their permitted range. The outfall was inspected at Chiques Creek. The area was clean, and the effluent looked clear. 1/7/2015: A routine inspection was conducted. An effluent grab sample was collected at the outfall, and all results were within their permitted range. The effluent was clear, and the outfall area was clear. Overall treatment appeared to be good based on field test results and visual observation. The mixed liquor in the aeration tank had moderate light brown foam with good floc formation. The clarifier weir and channel were clear. 1/27/2015: A follow up inspection was conducted. A new Hach portable meter was available and actual D.O. readings were being recorded. 12/28/2015: A routine inspection was conducted. The effluent was discolored and turbid. The clarifier had solids and foam on its surface. There was no discoloration or solids in the creek. All treatment units were online. 12/6/2016: DEP, Jason Sheaffer, and Pinch Pond, Inc. entered into a Consent Order and Agreement (COA). The COA was due to effluent violations, absence of calibration records, late and incomplete DMRs, and falsified DMR results. 9/15/2017: A routine inspection was conducted. The EQ tank was covered. The first aeration tank appeared medium brown and receives the RAS from the clarifier. The skimmer level in the clarifier was even with the weirs. No issues were noted.

	6/19/19: A routine inspection was conducted. No concerns were noted at the upper pump station. The lower pump station was filled to capacity. There was an issue with the floats being tangled that was resolved. The bar screen had an accumulation of rags up to the influent piping. The EQ was aerated and appeared medium gray. The influent side of the baffle had approximately 20% coverage of grease and floatables. The clarifier had approximately 10% coverage of popping sludge and 50% coverage of surface scum. The clarifier influent baffle had a layer of medium brown solids. The clarifier effluent trough had a thin layer of solids and algae. No tablets were present in the chlorine tablet feeders. The first section of the tank was aerated and had approximately 10% coverage of white fluffy foam. The second section of the tank was not aerated, and the contents appeared gray green. Dechlorination tablets were not present in the effluent weir box. The post aeration tank appeared clear and evenly aerated. The effluent had a slight yellow tint. Field results were collected. The initial reading was 1.95 mg/l. A second reading was collected at the outfall pipe and was 0.56 mg/l. A third reading was collected from the CCT effluent and was 0.75 mg/l. Mr. Sheaffer added declor tablets. White foam was visible at the discharge pipe prior to entering the stream. No deposits, foam, or algae were noted in the stream near the outfall.

Other Comments: There are currently no open violations associated with the permittee or the facility.

Compliance History

DMR Data for Outfall 001 (from September 1, 2018 to August 31, 2019)

Parameter	SEP-18	OCT-18	NOV-18	DEC-18	JAN-19	FEB-19	MAR-19	APR-19	MAY-19	JUN-19	JUL-19	AUG-19
Flow (MGD) Average Monthly	0.0036	0.0030	0.0034	0.0022	0.0023	0.0014	0.0016	0.0021	0.0077	0.0033	0.0036	0.0027
Flow (MGD) Daily Maximum	0.0100	0.0079	0.0172	0.0093	0.0126	0.0032	0.0140	0.0126	0.154	0.0111	0.0068	0.0054
pH (S.U.) Minimum	6.04	6.34	6.06	7.24	6.6	6.03	6.22	6.1	6.23	5.79	6.03	5.86
pH (S.U.) Maximum	7.34	7.53	8.52	7.87	8.53	7.95	8.18	7.97	8.01	7.52	7.64	8.05
DO (mg/L) Minimum	8.31	8.58	9.68	11.32	11.52	12.24	11.77	8.29	8.79	7.56	7.94	7.98
TRC (mg/L) Average Monthly	0.20	0.20	0.2	0.2	0.1	0.20	0.20	0.1	0.2	0.10	0.20	0.10
TRC (mg/L) Instantaneous Maximum	0.63	0.35	0.69	0.46	0.32	0.76	0.58	0.41	0.47	0.36	0.49	0.50
CBOD5 (mg/L) Average Monthly	3	3	4	6	4	4.0	5	7	4	7	8	5
TSS (mg/L) Average Monthly	4	5	0.01	0.01	3	3	4	8	9	13	28	9
Fecal Coliform (CFU/100 ml) Geometric Mean	115	47	4	5	0.01	0.01	10	0.01	4	50	85	687
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	310	53	13	2300	0.01	0.01	9700	4	4	2500	125	955
Nitrate-Nitrite (lbs/day) Annual Average				0.2								
Nitrate-Nitrite (mg/L) Annual Average				17								
Total Nitrogen (lbs/day) Annual Average				0.2								
Total Nitrogen (mg/L) Annual Average				18.3								
Total Nitrogen (lbs) Other Annual Final Effluent Total Annual				3.14								

Ammonia (mg/L) Average Monthly	1	0.235							2	2	3	0.472
TKN (lbs/day) Annual Average				0.2								
TKN (mg/L) Annual Average				1.3								
Total Phosphorus (lbs/day) Average Monthly	0.01	0.2	0.07	0.05	0.04	0.04	0.05	0.06	0.09	0.7	0.1	0.3
Total Phosphorus (mg/L) Average Monthly	10	9.5	8.7	4.5	3.4	2.7	4.8	6.1	8.8	19.2	2.873	16
Total Phosphorus (lbs) Total Monthly	4	5	2	1	1	1.0	2	2	3	22	4	8
Total Phosphorus (lbs) Other Annual Final Effluent Total Annual				43								

Compliance History

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

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	06/30/19	Min	5.79	S.U.	6.0	S.U.
pH	08/31/19	Min	5.86	S.U.	6.0	S.U.
pH	06/30/19	Min	5.79	S.U.	6.0	S.U.
Fecal Coliform	08/31/19	Geo Mean	687	CFU/100 ml	200	CFU/100 ml
Fecal Coliform	06/30/19	IMAX	2500	CFU/100 ml	1000	CFU/100 ml
Fecal Coliform	06/30/19	IMAX	2500	CFU/100 ml	1000	CFU/100 ml

Existing Effluent Limitations and Monitoring Requirements

The table below summarizes the effluent limits and monitoring requirements implemented in the existing NPDES permit.

Outfall 001

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30	XXX	60	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	20	XXX	40	2/month	8-Hr Composite
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Nitrate-Nitrite	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
TKN	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Total Nitrogen	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Calculation
Total Nitrogen	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus	XXX	254 Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation

Compliance Sampling Location: Outfall 001

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .01725
Latitude 40º 13' 57" **Longitude** 76º 26' 52"
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

Pursuant to 40 CFR § 122.44(d)(1)(i), more stringent requirements should be considered when pollutants are discharged at the levels which have the reasonable potential to cause or contribute to excursions above water quality standards.

WQM 7.0 ver. 1.0b is a water quality model designed to assist DEP in determining appropriate water quality based effluent limits (WQBELs) for carbonaceous biochemical oxygen demand ($CBOD_5$), ammonia (NH_3-N), and dissolved oxygen (D.O.). The model simulates two basic processes: In the NH_3-N module, the model simulates the mixing and degradation of NH_3-N in the stream and compares calculated instream NH_3-N concentrations to NH_3-N water quality criteria. In the D.O. module, the model simulates the mixing and consumption of D.O. in the stream due to the degradation of $CBOD_5$ and NH_3-N and compares calculated instream D.O. concentrations to D.O. water quality criteria. The model then determines the highest pollutant loadings that the stream can assimilate while still meeting water quality criteria under design conditions. DEP's Technical Guidance No. 391-2000-007 provides the technical methods contained in WQM 7.0 for determining wasteload allocations and for determining recommended NPDES effluent limits for point source discharges.

The model was utilized for this permit application. The flow data used to run the model was acquired from USGS PA StreamStats and is included in an attachment. Stream pH and temperature inputs for this model run were based on data acquired from the National Water Quality Monitoring Council website. Data was analyzed from the Water Quality Network (WQN) Station ID 206 on Chiques Creek from October 1998 to March 2019 for pH, and from October 1998 to October 2017 for temperature. DEP's Standard Operating Procedure (SOP) No. BPNPSM-PMT-033 (Establishing Effluent Limitations for Individual Sewage Permits) recommends using the 90th percentile of long-term data for background and discharge characteristics when using WQM 7.0. A 90th percentile analysis was performed on the data and resulted in a Stream pH of 8.3 and a Stream Temperature of 21°C. The Pinch Pond Campground discharge was modelled with the PA Dutch Country discharge to determine limitations due to their close proximity to each other.

The model output indicated a $CBOD_5$ average monthly limit of 25 mg/l, an NH_3-N average monthly limit of 6.76 mg/l, and a D.O. minimum limit of 5.0 mg/l were protective of water quality. The $CBOD_5$ limit is the same as the existing limit, and will remain in the permit. Based on the round-off guidelines from Chapter 5 of the Technical Guidance for the Development and Specification of Effluent Limitations (Guidance No. 362-0400-001), a NH_3-N limit of 6.5 mg/l will be added to the permit as a summertime limit. A multiplier of 3 times the summertime average monthly limit will be used to establish a limit for the winter

period. Monitoring requirements of 2/month using an 8-hr composite sample will be applied to be consistent with the existing permit limits.

There are no industrial/commercial users contributing industrial wastewater to the system and Pinch Pond Campground does not currently have an EPA-approved pretreatment program. Accordingly, evaluating reasonable potential of toxic pollutants is not necessary as effluent levels of toxic pollutants are expected to be insignificant.

Best Professional Judgement (BPJ) Limitations

Dissolved Oxygen (D.O.)

A minimum D.O. limit of 5.0 mg/L is a D.O. water quality criterion found in 25 Pa. Code § 93.7(a). This limit is included in the existing NPDES permit. This limit will continue to be included in the permit to ensure that the facility continues to achieve compliance with DEP water quality standards.

Total Residual Chlorine

The attached computer printout utilizes the equations and calculations as presented in the Department's May 1, 2003 Implementation Guidance for Total Residual Chlorine (TRC) (ID No. 391-2000-015) for developing chlorine limitations. The Guidance references Chapter 92, Section 92.2d (3) which establishes a standard BAT limit of 0.5 mg/l unless a facility-specific BAT has been developed. The attached printout indicates that a water quality limit of 0.5 mg/l would be needed to prevent toxicity concerns. It is recommended that a TRC limit of 0.5 mg/l monthly average and 1.6 mg/l instantaneous maximum be applied this permit cycle, the same as the existing limit.

Additional Considerations

Chesapeake Bay Total Maximum Daily Load (TMDL)

DEP developed a strategy to comply with the EPA and Chesapeake Bay Foundation requirements by reducing point source loadings of Total Nitrogen (TN) and Total Phosphorus (TP). This strategy can be located in the *Pennsylvania Chesapeake Watershed Implementation Plan* (WIP), dated January 11, 2011. Subsequently, an update to the WIP was published as the Phase 2 WIP. As part of the Phase 2 WIP, a *Phase 2 Watershed Implementation Plan Wastewater Supplement* (Phase 2 Supplement) was developed, providing an update on TMDL implementation for point sources and DEP's current implementation strategy for wastewater. The Phase 2 Supplement was most recently revised on September 6, 2017. Sewage discharges have been prioritized based on their design flow to the Bay. The highest priority (Phases 1, 2, and 3) dischargers will receive annual Cap Loads based on their design flow on August 29, 2005 and concentrations of 6 mg/l TN and 0.8 mg/l TP. These limits may be achieved through a combination of treatment technology, credits, or offsets. For Phase 4 and 5 facilities, Cap Loads are not currently being implemented for renewed or amended permits for facilities that do not increase design flow.

This facility is considered a Phase 5 non-significant discharger with a design flow less than 0.2 MGD but greater than 0.002 MGD. According to DEP's latest-revised Phase 2 Supplement, issuance of permits with monitoring and reporting for TN and TP is recommended for any Phase 5 non-significant sewage facilities (i.e., facilities with average annual design flows on August 29, 2005 less than 0.2 MGD but greater than 0.002 MGD). Furthermore, DEP's SOP No. BPNPSM-PMT-033 states that in general, at a minimum, monitoring for TN and TP should be included in new and reissued permits for sewage discharges with design flows > 2,000 gpd. TN and TP monitoring and a TP annual load limit are included in the existing permit, and will remain in the renewal.

Chiques Creek Alternate Restoration Plan

This facility discharges to Chiques Creek. Chiques Creek was included on Pennsylvania's 1996 303(d) List of Impaired Waters due to nutrient impairments. A Total Maximum Daily Load (TMDL) for the Chiques Creek Watershed was approved by the United States Environmental Protection Agency (EPA) on April 9, 2001. Due to several deficiencies within the TMDL, it was withdrawn with approval from EPA on October 28, 2015. DEP, Susquehanna River Basin Commission (SRBC) and watershed stakeholders have been in the process of developing a large scale monitoring and restoration plan. The goal of this Alternate Restoration Plan (ARP) is to address impacts to the Chiques Creek Watershed due to suspended solids/siltation and nutrient pollution. During the ongoing ARP development, this discharge permit will be renewed to conform with existing guidance. This permit will include a Total Phosphorus (TP) limit of 2.0 mg/l. The TP limit of 2.0 mg/l is derived from 25 Pa. Code § 96.5(c). This section states that "when it is determined that the discharge of phosphorus, alone or in

combination with the discharge of other pollutants, contributes or threatens to impair existing or designated uses in a free flowing surface water, phosphorus discharges from point source discharges shall be limited to an average monthly concentration of 2 mg/l." This is consistent with existing limits for other dischargers to the Chiques Creek Watershed. 25 Pa. Code 92a.51(a) allows for a compliance schedule to comply with water quality standards. Therefore, the TP limit will become enforceable one (1) year after issuance of the permit. A continued evaluation of dischargers to Chiques Creek will be performed as described in the NPDES Part C Conditions.

Chiques Creek TMDL

During the previous permit renewal, an evaluation was performed regarding phosphorus limitations. A TMDL was approved for Chiques Creek in 2001, and this facility was left out in error. A TMDL load based on existing performance and the design flow was included in the permit. The average TP concentration reported during several years of monitoring was 4.85 mg/l. A design flow of 0.01725 mgd resulted in a load of 254.7 lbs/yr., rounded to 254 lbs/yr. This TMDL load was included in the existing permit, and will remain in the renewal.

Anti-Degradation (93.4)

The effluent limits for this discharge 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. No High Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

303d Listed Streams

The discharge is located on a stream segment that is designated on the 303(d) list as impaired. There is an aquatic life impairment for agriculture due to siltation.

Class A Wild Trout Fisheries

No Class A Wild Trout Fisheries are impacted by this discharge.

Anti-Backsliding

Pursuant to 40 CFR § 122.44(l)(1), all proposed permit requirements addressed in this fact sheet are at least as stringent as the requirements implemented in the existing NPDES permit unless any exceptions addressed by DEP in this fact sheet.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through One Year From Effective Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30	XXX	60	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	19.5	XXX	39	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	6.5	XXX	13	2/month	8-Hr Composite
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Nitrate-Nitrite	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
TKN	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Total Nitrogen	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Calculation

Outfall 001, Effective Period: Permit Effective Date through One Year From Effective Date.

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Total Nitrogen	XXX	Report	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus	Report	254	XXX	XXX	XXX	1/month	Calculation

Compliance Sampling Location: Outfall 001

Other Comments: None

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: One Year From Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30	XXX	60	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	19.5	XXX	39	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	6.5	XXX	13	2/month	8-Hr Composite
Total Phosphorus	Report	XXX	XXX	2.0	XXX	4.0	2/month	8-Hr Composite
Nitrate-Nitrite	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
TKN	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Total Nitrogen	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Calculation

Outfall 001, Effective Period: One Year From Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Total Nitrogen	XXX	Report	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus	Report	254	XXX	XXX	XXX	1/month	Calculation

Compliance Sampling Location: Outfall 001

Other Comments: None

Tools and References Used to Develop Permit	
☒	WQM for Windows Model (see Attachment)
☐	PENTOXSD for Windows Model (see Attachment)
☒	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Toxics Screening Analysis Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☒	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☒	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.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 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, 391-2000-019, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 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, 391-2000-022, 3/1999.
☐	Design Stream Flows, 391-2000-023, 9/98.
☐	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.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other: