pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0081353**
Facility Type	**Non-Municipal**	APS ID	**537067**
Major / Minor	**Minor**	Authorization ID	**1166065**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Crowe Transportation**	Facility Name	**Southern States Elizabethtown Petro Products**
Applicant Address	2388 N Market Street	Facility Address	2388 N Market Street
	Elizabethtown, PA 17022		Elizabethtown, PA 17022
Applicant Contact	Brian Crowe	Facility Contact	Alan Miller
Applicant Phone	(717) 367-8535	Facility Phone	(717) 367-8535
Client ID	236567	Site ID	249044
Ch 94 Load Status	Not Overloaded	Municipality	West Donegal Township
Connection Status	No Limitations	County	Lancaster
Date Application Received	November 17, 2016	EPA Waived?	No
Date Application Accepted	January 17, 2017	If No, Reason	Conewago Creek TMDL
Purpose of Application	NPDES Renewal.		

Summary of Review

Crowe Transportation 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 18, 2012 and became effective on June 1, 2012, authorizing discharge of treated sewage from the existing wastewater treatment plant (WWTP) located in West Donegal Township, Lancaster County into Unnamed Tributary 09244 to Conewago Creek.

Per the previous fact sheet, the effluent discharges to the UNT on the south side of the Penn Central railroad tracks. The stream flows underneath the tracks for 1,100 feet to Conewago Creek. The aquatic life observed indicated a perennial stream. The existing WWTP consisted of four septic tanks in series followed by sand filters, chlorinator, and a chlorine contact tank. Iron sulfate was added to the septic tanks to remove phosphorus. The facility was used by Agway as a distribution center until 2004 when it was sold to a trucking firm (Crowe Transportation) to be used as a warehouse. Materials used by Agway such as fencing, treated lumber, and farm items are no longer stored outside.

Changes in this renewal: A monitoring requirement for Total Nitrogen (TN) and TN species 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*, 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

Approve	Deny	Signatures	Date
		Benjamin R. Lockwood / Environmental Engineering Specialist	June 19, 2019
		Daniel W. Martin, P.E. / Environmental Engineer Manager	
		Maria D. Bebenek, P.E. / Program Manager	

Summary of Review

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 at the end of this fact sheet.

Supplemental information:

Crowe Transportation PA0C

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.007
Latitude	40º 9' 43"	Longitude	76º 38' 48"
Quad Name	Middletown	Quad Code	1732
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Conewago Creek (TSF)	Stream Code	09244
NHD Com ID	56405541	RMI	0.25
Drainage Area	0.54 mi^2	Yield (cfs/mi^2)	0.128
Q_{7-10} Flow (cfs)	0.069	Q_{7-10} Basis	USGS Stream Gage #01573560
Elevation (ft)	397	Slope (ft/ft)	
Watershed No.	7-G	Chapter 93 Class.	TSF, MF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	Final	Name	Conewago Creek Watershed
Nearest Downstream Public Water Supply Intake	Columbia Water Company		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	25

Changes Since Last Permit Issuance: Stream flows were determined by establishing a correlation to the yield of USGS gage station #01573560 on Swatara Creek. The Q_{7-10} and drainage area at the gage are 62 ft^3/s and 483 mi^2, respectively. The Q_{7-10} runoff rate at the gage station was calculated as follows:

- Q_{7-10} = (62 ft^3/s)/483 mi^2 = 0.128 $ft^3/s/mi^2$

The drainage area at the discharge point = 0.54 mi^2.

The Q_{7-10} at the discharge point = 0.54 mi^2 x 0.128 cfs/mi^2 = 0.069 ft^3/s.

Other Comments: None

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	Variable (stormwater)
Latitude	40º 8' 49"	Longitude	76º 38' 36"
Quad Name	Middletown	Quad Code	1732
Wastewater Description:	Stormwater, from roof drains and a grass area on the east side of warehouses		
Receiving Waters	Unnamed Tributary to Conewago Creek (TSF)	Stream Code	09244
NHD Com ID	56405541	RMI	0.25
Drainage Area	0.54 mi^2	Yield (cfs/mi^2)	0.128
Q_{7-10} Flow (cfs)	0.069	Q_{7-10} Basis	USGS Stream Gage #01573560
Elevation (ft)	397	Slope (ft/ft)	
Watershed No.	7-G	Chapter 93 Class.	TSF, MF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	Final	Name	Conewago Creek Watershed
Nearest Downstream Public Water Supply Intake	Columbia Water Company		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	25

Changes Since Last Permit Issuance: See stream flow information for Outfall 001

Other Comments: None

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	Variable (stormwater)
Latitude	40º 8' 44"	Longitude	76º 38' 33"
Quad Name	Middletown	Quad Code	1732
Wastewater Description:	Stormwater, from parking lot and a dock area on south side of the warehouses		
Receiving Waters	Unnamed Tributary to Conewago Creek (TSF)	Stream Code	09244
NHD Com ID	56405541	RMI	0.25
Drainage Area	0.54 mi^2	Yield (cfs/mi^2)	0.128
Q_{7-10} Flow (cfs)	0.069	Q_{7-10} Basis	USGS Stream Gage #01573560
Elevation (ft)	397	Slope (ft/ft)	
Watershed No.	7-G	Chapter 93 Class.	TSF, MF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	Final	Name	Conewago Creek Watershed
Nearest Downstream Public Water Supply Intake	Columbia Water Company		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	25

Changes Since Last Permit Issuance: See stream flow information for Outfall 001

Other Comments: None

Discharge, Receiving Waters and Water Supply Information

Outfall No.	004	Design Flow (MGD)	Variable (stormwater)
Latitude	40º 9' 33"	Longitude	76º 38' 48"
Quad Name	Middletown	Quad Code	1732
Wastewater Description:	Stormwater, from the storage yard and railroad spur on west side of the warehouses		
Receiving Waters	Unnamed Tributary to Conewago Creek (TSF)	Stream Code	09244
NHD Com ID	56405541	RMI	0.25
Drainage Area	0.54 mi^2	Yield (cfs/mi^2)	0.128
Q_{7-10} Flow (cfs)	0.069	Q_{7-10} Basis	USGS Stream Gage #01573560
Elevation (ft)	397	Slope (ft/ft)	
Watershed No.	7-G	Chapter 93 Class.	TSF, MF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	Final	Name	Conewago Creek Watershed
Nearest Downstream Public Water Supply Intake	Columbia Water Company		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	25

Changes Since Last Permit Issuance: See stream flow information for Outfall 001

Other Comments: None

Treatment Facility Summary				
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Secondary	Septic Tank Sand Filter	Hypochlorite	0.007
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.007		Not Overloaded	N/A	N/A

Changes Since Last Permit Issuance: None

Other Comments: The treatment process is as follows: Septic Tanks – Dosing Tank – Two (2) Sand Filter Beds – Chlorinator – Chlorine Contact Tank – Outfall 001 to UNT to Conewago 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:	12/3/2014: A routine inspection was conducted. The effluent was clear, and the pH and TRC samples were within the permitted range. It was noted that the overall treatment appeared to be good, based on DMRs, field tests, and visual observation. The filter beds were in need of maintenance at the time of inspection. The stormwater outfalls were checked and all were actively discharging clear stormwater. No issues were noted. 6/8/2016: A routine inspection was conducted. The sand beds were covered in vegetation at the time of the inspection. The effluent was clear. All of the field readings collected were within the permit limits.

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

Compliance History

DMR Data for Outfall 001 (from April 1, 2018 to March 31, 2019)

Parameter	APR-18	MAY-18	JUN-18	JUL-18	AUG-18	SEP-18	OCT-18	NOV-18	DEC-18	JAN-19	FEB-19	MAR-19
Flow (MGD) Average Monthly	0.0018	0.00148	0.00176	0.001647	0.0025	0.001951	0.00177	0.0022	0.002	0.00244	0.00125	0.001401
Flow (MGD) Daily Maximum	0.0018	0.00148	0.00186	0.001661	0.0025	0.002	0.00177	0.0023	0.0021	0.00244	0.00128	0.0015
pH (S.U.) Minimum	7.0	7.0	6.9	6.8	6.9	6.6	6.6	6.5	6.4	6.7	7.0	6.9
pH (S.U.) Maximum	7.4	7.3	7.5	7.5	7.2	7.2	8.8	7.0	6.9	7.4	7.3	7.4
TRC (mg/L) Average Monthly	0.07	0.06	0.09	0.05	0.04	0.04	0.07	0.07	0.06	0.06	0.07	0.05
CBOD5 (mg/L) Average Monthly	< 2	3.1	3	< 2.2	2.7	2.8	3.5	< 2	< 2	< 2	< 2	3.7
TSS (mg/L) Average Monthly	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 4	< 4	< 4
Fecal Coliform (CFU/100 ml) Geometric Mean	167	< 4	< 1	< 1	47	616	< 1	28	< 1	7	219	< 4
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	250	7	< 1	1	76	1230	< 1	48	< 1	9	385	6
Ammonia (mg/L) Average Monthly	< 0.155	< 0.88	< 0.1	0.373	0.10	0.216	< 0.1	< 0.12	< 0.1	< 0.1	< 0.1	< 0.1
Total Phosphorus (mg/L) Average Monthly	0.77	1.18	0.66	1.0	0.53	< 0.41	0.71	0.69	0.61	0.57	0.6	0.52
Total Phosphorus (lbs) Total Monthly	4.50	4.7	4.7	4.8	4.8	4.5	4.1	4.0	4.0	4.0	3.8	3.7
Total Phosphorus (lbs) Total Annual						4.40						

Existing Effluent Limitations and Monitoring Requirements

The tables below summarize the effluent limits and monitoring requirements implemented in the existing NPDES permit.

Outfall 001

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Total Annual	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	XXX	XXX	9.0	1/day	Grab
TRC	XXX	XXX	XXX	0.3	XXX	1.0	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) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	7.0	XXX	14	2/month	8-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	21	XXX	42	2/month	8-Hr Composite
Total Phosphorus	Report Total Mo	XXX	XXX	2.0	XXX	4.0	2/month	8-Hr Composite
Total Phosphorus	XXX	43	XXX	XXX	XXX	XXX	1/year	Calculation

Compliance Sampling Location: Outfall 001

Outfall 002

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
TSS	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
TKN	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 002

Outfall 003

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
TSS	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
TKN	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 003

Outfall 004

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
TSS	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
TKN	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 004

Permit No. PA0081353

Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	.007
Latitude	40º 9' 43"	**Longitude**	76º 38' 48"
Wastewater Description:	Sewage Effluent		

Technology-Based Limitations

The facility is regulated by standards found in 40 CFR § 133.102 and 25 Pa. Code § 92a.47(a). These standards are shown below:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Comments: The abovementioned technology-based limitations (TBELs) apply, subject to water quality analysis and BPJ where applicable.

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 model output indicated a $CBOD_5$ average monthly limit of 25 mg/l and an NH_3-N average monthly limit of 9.88 mg/l were protective of water quality.

The flow data used to run the model was acquired from USGS PA StreamStats and USGS Stream Gage #01573560, and is included as an attachment. A more stringent NH_3-N limit is included in the existing permit, and will remain in the renewal permit. The $CBOD_5$ limit of 25 mg/l is the same as in the existing permit.

There are no industrial/commercial users contributing industrial wastewater to the system and Crowe Transportation 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.

Permit No. PA0081353

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. The existing TRC permit limit of 0.3 mg/l is more stringent, and will remain in the permit.

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. As a result, a monitoring requirement for TN will be added to the permit. A monitoring frequency of 2/month will be used, to be consistent with the existing permit limits. A TP limit is already included in the existing permit.

Stormwater

The existing permit has 3 stormwater outfalls: 002, 003, and 004. Monitoring requirements for the stormwater outfalls in the existing permit were derived from Appendix J of the Stormwater PAG03 permit. The most current monitoring requirements in Appendix J of the PAG03 permit are indicated below. Additionally, a waste oil transfer facility operated by Heritage – Crystal Clean LLC is located within the permitted area that collects industrial stormwater. Appendix L of the Stormwater PAG03 permit would apply for this type of industrial activity. The monitoring requirements for Appendix L are the same as Appendix J. These parameters will replace the existing monitoring requirements in the permit.

The permittee must monitor and report analytical results for the parameters listed on the Discharge Monitoring Reports (DMRs) for Outfall 002, 003, and 004. The values below are benchmark values, not effluent limitations, and exceedances do not constitute permit violations. If the stormwater discharge is found to consistently exceed them, an individual NPDES permit could be amended at the Department's initiative. In this case, a draft permit amendment would be issued and a comment period allowed.

Parameter	Monitoring Requirements		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
Total Suspended Solids (TSS) (mg/L)	1 / 6 months	Grab	100
Oil and Grease (mg/L)	1 / 6 months	Grab	30

Permit No. PA0081353

Conewago Creek TMDL
A TMDL for Conewago Creek was finalized on March 2, 2001, and was revised on June 27, 2006. This facility was included in the revision of the TMDL. Crowe Transportation had a phosphorus allocation based on the design flow and an effluent limit of 2.0 mg/l. The average monthly TP effluent limit of 2.0 mg/l and total annual limit of 43 lbs/year were 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 listed as attaining uses. Approximately 0.25 miles downstream, the Conewago Creek has an aquatic life impairment for agriculture due to nutrients and total suspended solids. The permit has an existing effluent limit for TP, and a monitoring requirement for TN has been added.

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 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
TRC	XXX	XXX	XXX	0.3	XXX	1.0	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 Nov 1 - Apr 30	XXX	XXX	XXX	21	XXX	42	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	7.0	XXX	14	2/month	8-Hr Composite
TKN	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Nitrate-Nitrite as N	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Total Phosphorus	Report Total Mo	43 Total Annual	XXX	2.0	XXX	4.0	2/month	8-Hr Composite

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 002, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Daily Maximum	Maximum	Instant. Maximum		
TSS	XXX	XXX	XXX	Report	XXX	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/6 months	Grab

Compliance Sampling Location: 002

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 003, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Daily Maximum	Maximum	Instant. Maximum		
TSS	XXX	XXX	XXX	Report	XXX	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/6 months	Grab

Compliance Sampling Location: 003

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 004, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Daily Maximum	Maximum	Instant. Maximum		
TSS	XXX	XXX	XXX	Report	XXX	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/6 months	Grab

Compliance Sampling Location: 004

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: