Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0043044**
Facility Type	**Municipal**	APS ID	**472188**
Major / Minor	**Minor**	Authorization ID	**1452033**

Applicant and Facility Information

Applicant Name	**Municipal Authority of the Borough of Ringtown**	Facility Name	**Municipal Authority of the Borough of Ringtown WWTP**
Applicant Address	PO Box 350 Ringtown, PA 17967-0350	Facility Address	Spring And Centre Streets Ringtown, PA 17967
Applicant Contact	Ray Sachleben, Chairman	Facility Contact	Ryan Detweiler, Operator
Applicant Phone	(570) 889-3095	Facility Phone	(215) 840-6161
Client ID	84403	Site ID	452069
Ch 94 Load Status	Existing and Projected Hydraulic Overload	Municipality	Ringtown Borough
Connection Status	Legally Modified Connection Ban	County	Schuylkill
Date Application Received	August 3, 2023	EPA Waived?	Yes
Date Application Accepted	April 4, 2024	If No, Reason	-

Purpose of Application: Renewal of NPDES permit for discharge of treated sewage.

Summary of Review

The applicant is requesting the renewal of an NPDES permit to discharge up to 0.125 MGD of treated sewage into Dark Run, a High-Quality, Cold-Water Fishery, Migratory Fish (HQ-CWF, MF) receiving stream in State Water Plan Basin 5-E (Catawissa – Roaring Creeks). As per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than its designated use. This stream segment is designated as a naturally reproducing trout stream as per PA Fish & Boat Commission. This discharge is not expected to affect public water supplies.

Limitations for pH, $CBOD_5$, Total Suspended Solids (TSS), and Fecal Coliform are technology-based and carried over from the previous permit.

Limitations for Ammonia-Nitrogen are water quality-based and carried over from the previous permit. WQM 7.0 modeling did not recommend stricter Ammonia-Nitrogen limits.

WQM 7.0 modeling recommended a stricter instantaneous minimum limitation of 6.0 mg/L for Dissolved Oxygen (DO). eDMR data from July 1, 2024 to June 30, 2025 (which can be observed on page 5 of this fact sheet) indicates the facility would not currently be able to meet this new limitation. Therefore, the new limitation will come into effect four years after the permit effective date. The DO limitation from the previously issued permit is in effect for the first four years after the permit effective date.

The Total Residual Chlorine (TRC) Calculation Spreadsheet recommends stricter limitations than the previous permit. The permittee will be required to meet the new water quality-based limits for TRC starting four years after the effective date of the permit (see Part C.III.). TRC limitations from the previously issued permit are in effect for the first four years after the permit effective date.

Approve	Deny	Signatures	Date
X		/s/ Allison Seyfried Zukosky / Project Manager	August 12, 2025
X		/s/ Edward Dudick, P.E. / Engineer Manager	August 12, 2025

Summary of Review

Sewage discharges now require monitoring and reporting for E. Coli. A monitoring frequency of 1/month for design flows >= 1 MGD, 1/quarter for design flows >= 0.05 and < 1 MGD, 1/year for design flows of 0.002 – 0.05 MGD will be utilized.

The annual monitoring and reporting for Total Nitrogen, Total Phosphorous, Total Kjeldahl Nitrogen, and Nitrate-Nitrite as N has been maintained in this permit.

Per current Standard Operating Procedures for Publicly Owned Treatment Plants, the weekly raw sewage influent monitoring/ reporting for TSS and BOD_5 has been maintained in the permit.

Pollutant sampling results submitted with the permit application were entered into the Toxic Management Spreadsheet (TMS). The TMS recommended limits for Total Copper and monitoring/reporting for Total Zinc and Total Lead. The permittee was given the opportunity to conduct a minimum of 10 additional effluent samples for these parameters. The permittee collected 10 additional samples during March 2025 through May 2025 and provided the results to the Department via email on August 6, 2025. These updated results were used to re-run the modeling. The modeling indicated the Total Copper limits and Total Zinc monitoring/reporting shall still be established.

Therefore, Total Copper limitations were added to the permit and will come into effect four years after the permit effective date. Monitoring/reporting requirements are included in the permit until the limitations come into effect. Weekly monitoring/ reporting for Total Zinc has also been included. The Part C. III. condition regarding Toxics Reduction Evaluations (TREs) is added to the permit and applies to the Total Copper limitations. The permittee will have the option to accept the implementation of the limitations or to perform site-specific studies to verify or refine the WQBELs.

A TMDL (Total Maximum Daily Load) for the Catawissa Creek Watershed was approved by EPA on April 9, 2003. The TMDL addresses metals (iron, manganese and aluminum) and depressed pH associated with acid mine drainage (AMD). There are no approved Waste Load Allocations (WLA) for this facility. Since this is a sewage discharge with no industrial contributors, no appreciable quantities of these metals are expected to be present in the effluent.

The 2024 Chapter 94 Report indicates an existing and projected hydraulic overload condition. The Report also indicates that the Municipal Authority of the Borough of Ringtown is aware of the hydraulic overloading occurring at the plant. A Corrective Action Plan was submitted in 2017 and is under review by DEP. The Report states the Plan will be implemented once approved.

For this permit renewal, all monitoring frequencies for parameters with limitations are consistent with the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits* (document no. 362-0400-001).

There are no representative stream gages in the vicinity of the outfall and the drainage area at Outfall 001 is out of the recommended tolerance for the low flow calculation using USGS StreamStats. Therefore, the default Low Flow Yield (LFY) of 0.1 cfs/mi^2 was used to model the discharge. For modeling inputs, RMI values were obtained using the "PA Historic Streams" feature of eMapPA, drainage areas were delineated using USGS's StreamStats Interactive Map, and elevations were obtained using the elevation profile feature of StreamStats.

The existing permit expired on January 31, 2025 and the application for renewal was received on time.

A Water Management System Inspection query indicated that on July 27, 2023 a Routine/Partial Inspection was performed.

There are currently no open violations for this client that warrant withholding issuance of this permit.

Sludge use and disposal description and location(s): As per the permittee's NPDES Renewal Application, sludge is hauled to the Greater Hazleton Joint Sewer Authority WWTP in West Hazleton, PA by Environmental Services Corporation.

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

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.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.125
Latitude	40º 51' 31.91"	Longitude	-76º 13' 19.61"
Quad Name	Shenandoah	Quad Code	1236
Wastewater Description:	Sewage Effluent		
Receiving Waters	Dark Run (HQ-CWF, MF)	Stream Code	27585
NHD Com ID	65642477	RMI	2.29
Drainage Area	2.79 mi^2	Yield (cfs/mi^2)	0.10
Q_{7-10} Flow (cfs)	0.279	Q_{7-10} Basis	State-wide default
Elevation (ft)	985.74	Slope (ft/ft)	-
Watershed No.	5-E	Chapter 93 Class.	HQ-CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-
Nearest Downstream Public Water Supply Intake	Catawissa Municipal Water Authority		
PWS Waters	Catawissa Creek	Flow at Intake (cfs)	-
PWS RMI	1.01	Distance from Outfall (mi)	~ 27 miles

Treatment Facility Summary

Treatment Facility Name: Municipal Authority of the Borough of Ringtown WWTP

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Aeration	Chlorination	0.118 (2020-2022)

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.125	225	Existing and Projected Hydraulic Overload	Holding/Pumped	Hauled

Compliance History

DMR Data for Outfall 001 (from July 1, 2024 to June 30, 2025)

Parameter	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24
Flow (MGD) Average Monthly	0.14984	0.3315	0.1026	0.1728	0.1131	0.0837	0.1831	0.1445	0.096	0.0619	0.17167	0.11614
Flow (MGD) Daily Maximum	0.3882	1.4019	0.1727	0.6479	0.3439	0.2145	0.8703	0.3207	0.1457	0.0999	0.6175	0.1896
pH (S.U.) Minimum	6.25	6.55	6.53	6.55	6.48	6.57	6.53	6.52	6.6	6.62	6.42	6.28
pH (S.U.) Maximum	7.32	7.07	7.37	7.19	7.22	7.1	7.11	7.24	7.28	7.38	8.18	7.18
DO (mg/L) Minimum	4.68	5.14	5.07	5.08	5.37	5.64	5.06	5.16	5.08	5.07	5.16	5.60
TRC (mg/L) Average Monthly	0.25	0.22	0.27	0.27	0.25	0.29	0.29	0.25	0.23	0.22	0.24	0.24
TRC (mg/L) Instantaneous Maximum	0.70	0.75	0.58	0.77	0.79	0.75	0.75	0.56	0.55	0.45	0.48	0.26
CBOD5 (lbs/day) Average Monthly	< 7.0	< 43.0	< 5.0	< 7.7	< 6.0	< 4.6	< 15.6	< 12.2	< 6.0	< 3.2	< 7.2	< 6.2
CBOD5 (lbs/day) Weekly Average	< 12.0	133.0	< 8.0	8.5	< 8.1	< 6.1	< 43.5	24.9	< 7.3	< 4.1	< 12.0	< 9.5
CBOD5 (mg/L) Average Monthly	< 6.0	< 7.4	< 6.0	< 6.4	< 6.5	< 6.0	< 6.0	9.5	< 6.0	< 6.0	< 6.0	< 6.0
CBOD5 (mg/L) Weekly Average	< 6.0	11.4	< 6.0	8.0	7.0	< 6.0	< 6.0	20.0	< 6.0	< 6.0	< 6.0	< 6.0
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	45	145	84	83	66	87	132	88	90	106	87	68
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	60	351	113	95	93	167	218	148	210	130	134	138
BOD5 (mg/L) Raw Sewage Influent Average Monthly	41	48	102	69	83	101	90	68	86	54	104	79
TSS (lbs/day) Average Monthly	< 6.2	< 33.0	< 4.5	< 7.6	15.5	< 4.6	17.0	< 6.5	< 5.0	< 3.0	< 6.0	< 5.7

TSS (lbs/day) Raw Sewage Influent Average Monthly	44	156	60	85	71	93	163	161	152	152	95	107
TSS (lbs/day) Raw Sewage Influent Daily Maximum	54	316	138	129	104	152	210	231	228	198	150	218
TSS (lbs/day) Weekly Average	< 9.9	98.2	< 6.5	12.1	28.3	6.4	52.3	< 9.6	< 6.1	4.6	< 10.0	8.5
TSS (mg/L) Average Monthly	< 5.3	< 6.0	< 5.0	< 6.5	16.4	< 6.1	5.6	< 5.0	< 5.0	< 5.7	< 5.0	< 5.5
TSS (mg/L) Raw Sewage Influent Average Monthly	40	40	74	68	91	111	131	120	159	83	100	101
TSS (mg/L) Weekly Average	6.0	8.4	< 5.0	10.8	28.0	9.0	7.2	< 5.0	< 5.0	6.8	5.0	7.2
Fecal Coliform (CFU/100 ml) Geometric Mean	32	> 32	9	5	< 71	35	50	18	22	54	26	29
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	125.9	> 2419.6	60.2	26.2	1986.3	152.3	920.8	32.7	248.1	104.3	65.1	214.2
Nitrate-Nitrite (lbs/day) Annual Average							21					
Nitrate-Nitrite (mg/L) Annual Average							11.9					
Total Nitrogen (lbs/day) Annual Average							21					
Total Nitrogen (mg/L) Annual Average							11.8					
Ammonia (lbs/day) Average Monthly	2.0	< 6.0	< 0.4	< 0.7	< 0.6	< 0.2	< 0.7	< 0.3	< 0.2	< 0.1	< 0.2	< 0.3
Ammonia (mg/L) Average Monthly	1.8	< 0.7	< 0.5	< 0.7	< 0.6	< 0.3	< 0.3	< 0.2	< 0.2	< 0.2	< 0.2	< 0.3
TKN (lbs/day) Annual Average							< 2					
TKN (mg/L) Annual Average							< 1					
Total Phosphorus (lbs/day) Annual Average							2					
Total Phosphorus (mg/L) Annual Average							0.851					

Compliance History

Effluent Violations for Outfall 001, from: August 1, 2024 To: June 30, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
DO	06/30/25	Min	4.68	mg/L	5.0	mg/L
CBOD5	05/31/25	Avg Mo	< 43.0	lbs/day	26.0	lbs/day
CBOD5	12/31/24	Wkly Avg	< 43.5	lbs/day	41.7	lbs/day
CBOD5	05/31/25	Wkly Avg	133.0	lbs/day	41.7	lbs/day
TSS	05/31/25	Avg Mo	< 33.0	lbs/day	31.3	lbs/day
TSS	05/31/25	Wkly Avg	98.2	lbs/day	47.0	lbs/day
TSS	12/31/24	Wkly Avg	52.3	lbs/day	47.0	lbs/day
Fecal Coliform	05/31/25	Geo Mean	> 32	CFU/100 ml	200	CFU/100 ml
Fecal Coliform	05/31/25	IMAX	> 2419.6	CFU/100 ml	1000	CFU/100 ml
Ammonia	05/31/25	Avg Mo	< 6.0	lbs/day	5.2	lbs/day

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.125
Latitude 40º 51' 32.00" **Longitude** -76º 13' 20.00"
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)
E. Coli (No./100 ml)	Report	IMAX	-	92a.61

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Ammonia-Nitrogen Nov 1 - Apr 30	15.0	Average Monthly	WQM 7.0 and Previous Modeling
	30.0	IMAX	
Ammonia-Nitrogen May 1 - Oct 31	5.0	Average Monthly	
	10.0	IMAX	
Total Residual Chlorine	0.22	Average Monthly	TRC Spreadsheet
	0.72	IMAX	
Dissolved Oxygen	6.0	Minimum	WQM 7.0
Copper, Total	0.022	Average Monthly	Toxic Modeling Spreadsheet
	0.034	Daily Maximum	
	0.055	IMAX	
Zinc, Total	Report	Average Monthly	
	Report	Daily Maximum	
Biochemical Oxygen Demand (BOD5) Raw Sewage Influent	Report	Average Monthly	POTW Requirements
Total Suspended Solids Raw Sewage Influent	Report	Average Monthly	
Nitrate-Nitrite as N	Report	Annual Average	Chesapeake Bay & Previous Permit
Total Nitrogen	Report	Annual Average	
Total Kjeldahl Nitrogen	Report	Annual Average	
Total Phosphorus	Report	Annual Average	

Anti-Backsliding

No limitations were made less stringent.

StreamStats Data:

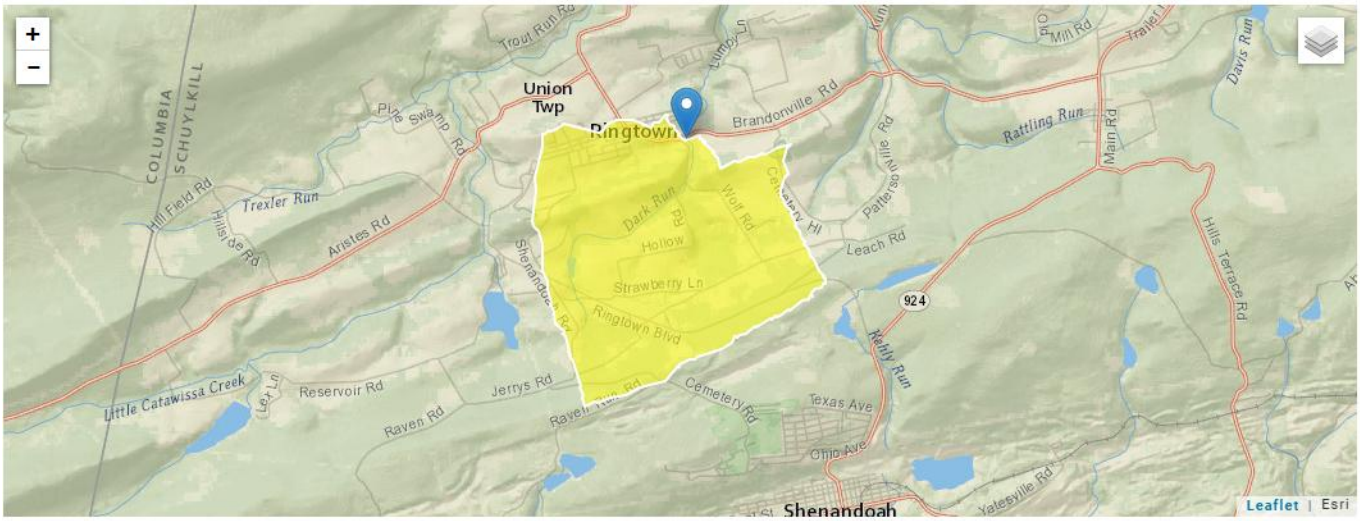
At Outfall 001 on Dark Run:

RMI	Elevation (ft)	Drainage Area (mi²)	Q_{7-10} Flow (cfs)
2.29	985.74	2.79	0.293

$$Low\ Flow\ Yield\ using\ StreamStats = \frac{0.293\ ft^3/sec}{2.79\ mi^2} = \mathbf{0.105}\ \frac{\boldsymbol{ft^3/sec}}{\boldsymbol{mi^2}}$$

StreamStats Report

Region ID:	PA
Workspace ID:	PA20250219193146594000
Clicked Point (Latitude, Longitude):	40.85806, -76.22233
Time:	2025-02-19 14:32:11 -0500



Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units
CARBON	Percent Carbonate	0	percent
DRNAREA	Drainage Area	2.79	square miles

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

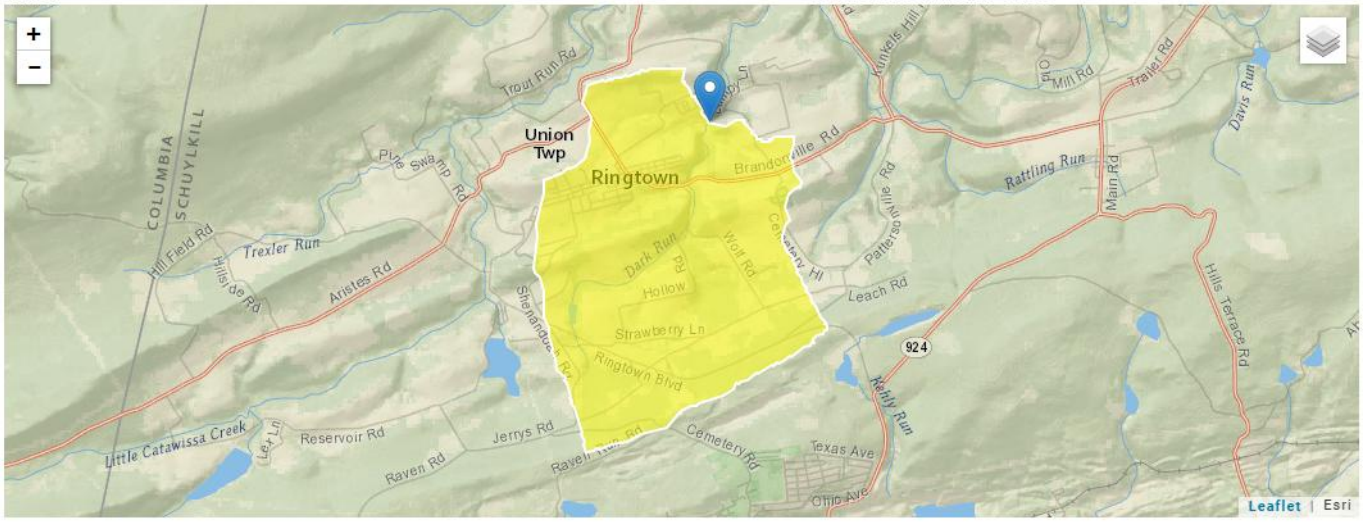
Statistic	Value	Unit
7 Day 2 Year Low Flow	0.595	ft^3/s
30 Day 2 Year Low Flow	0.773	ft^3/s
7 Day 10 Year Low Flow	0.293	ft^3/s

At confluence with Unnamed Tributary to Dark Run (27587):

RMI	Elevation (ft)	Drainage Area (mi^2)
1.78	950.60	3.65

StreamStats Report

Region ID: PA
Workspace ID: PA20250219194938145000
Clicked Point (Latitude, Longitude): 40.86438, -76.21930
Time: 2025-02-19 14:50:21 -0500



Parameter Code	Parameter Name	Value	Units
CARBON	Percent Carbonate	0	percent
DRNAREA	Drainage Area	3.65	square miles

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

There are no nearby representative stream gages to obtain low flow data from and the drainage area at the proposed outfall is out of the recommended tolerance for the low flow calculation using USGS StreamStats. The state-wide default LFY was used to calculate the $Q_{7\text{-}10}$.

Using the state-wide Low-Flow Yield (LFY) of 0.1 cfs/mi^2:

$$\frac{0.1\ ft^3/sec}{mi^2} \times 2.79\ mi^2 = \frac{\mathbf{0.279\ ft^3}}{\mathbf{sec}}$$

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
05E	27585	DARK RUN

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)
2.290	Ringtown Boro	PA0043044	0.125	CBOD5	25		
				NH3-N	5.03	10.06	
				Dissolved Oxygen			6

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.279	= Q stream (cfs)	0.5	= CV Daily
0.125	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.479	1.3.2.iii	WLA cfc = 0.460
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.179	5.1d	LTA_cfc = 0.267

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.220	AFC
		INST MAX LIMIT (mg/l) = 0.719	

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)
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
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)
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)
LTA_cfc	wla_cfc*LTAMULT_cfc
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)
INST MAX LIMIT	1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)

Additional Sample Results Summary

	Total Copper (mg/L)	Total Lead (mg/L)	Total Zinc (mg/L)	
3/12/2025	0.032	<0.001	0.0128	
3/19/2025	0.0273	<0.001	0.0236	
3/26/2025	0.0358	<0.001	0.016	
4/2/2025	0.0431	<0.001	0.0199	
4/8/2025	0.0447	<0.001	0.0172	
4/17/2025	0.0433	<0.001	0.0206	
4/25/2025	0.0651	<0.001	0.0282	
4/30/2025	0.0598	<0.001	0.0272	
5/9/2025	0.0316	<0.001	0.0292	
5/13/2025	0.0284	<0.001	0.0246	
Total:	0.04111	<0.001	0.02193	mg/L
	41.11	<0.001	21.93	µg/L

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Discharge Information

Instructions | Discharge | Stream

Facility: Municipal Authority of the Borough of Ringtow | NPDES Permit No.: PA0043044 | Outfall No.: 001

Evaluation Type: Major Sewage / Industrial Waste | Wastewater Description: Treated Sewage

Discharge Characteristics								
Design Flow (MGD)*	Hardness (mg/l)*	pH (SU)*	Partial Mix Factors (PMFs)				Complete Mix Times (min)	
			AFC	CFC	THH	CRL	Q_{7-10}	Q_h
0.125	100	7						

					0 if left blank		0.5 if left blank		0 if left blank			1 if left blank	
	Discharge Pollutant	Units	Max Discharge Conc		Trib Conc	Stream Conc	Daily CV	Hourly CV	Stream CV	Fate Coeff	FOS	Criteria Mod	Chem Transl
Group 1	Total Dissolved Solids (PWS)	mg/L		448									
	Chloride (PWS)	mg/L		102									
	Bromide	mg/L		1.31									
	Sulfate (PWS)	mg/L		21.5									
	Fluoride (PWS)	mg/L											
Group 2	Total Aluminum	µg/L											
	Total Antimony	µg/L											
	Total Arsenic	µg/L											
	Total Barium	µg/L											
	Total Beryllium	µg/L											
	Total Boron	µg/L											
	Total Cadmium	µg/L											
	Total Chromium (III)	µg/L											
	Hexavalent Chromium	µg/L											
	Total Cobalt	µg/L											
	Total Copper	mg/L		0.04111									
	Free Cyanide	µg/L											
	Total Cyanide	µg/L											
	Dissolved Iron	µg/L											
	Total Iron	µg/L											
	Total Lead	mg/L	<	0.001									
	Total Manganese	µg/L											
	Total Mercury	µg/L											
	Total Nickel	µg/L											
	Total Phenols (Phenolics) (PWS)	µg/L											
	Total Selenium	µg/L											
	Total Silver	µg/L											
	Total Thallium	µg/L											
	Total Zinc	mg/L		0.02193									
	Total Molybdenum	µg/L											
	Acrolein	µg/L	<										
	Acrylamide	µg/L	<										
	Acrylonitrile	µg/L	<										
	Benzene	µg/L	<										
	Bromoform	µg/L	<										

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Stream / Surface Water Information

Municipal Authority of the Borough of Ringtown, NPDES Permit No. PA0043044, Outfall 001

Instructions | Discharge | Stream

Receiving Surface Water Name: Dark Run

No. Reaches to Model: 1

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

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi^2)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	027585	2.29	985.74	2.79			Yes
End of Reach 1	000000	1.78	950.6	3.65			Yes

$Q_{7\text{-}10}$

Location	RMI	LFY (cfs/mi^2)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	2.29	0.1										100	7		
End of Reach 1	1.78	0.1													

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Location	RMI	LFY (cfs/mi^2)	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	2.29														
End of Reach 1	1.78														

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

No. Samples/Month: 4

Pollutants	Mass Limits		Concentration Limits				Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units			
Total Copper	0.023	0.036	0.022	0.034	0.055	mg/L	0.022	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Total Zinc	Report	Report	Report	Report	Report	mg/L	0.19	AFC	Discharge Conc > 10% WQBEL (no RP)

Updated 8.8.2025 TMS PA0043044.pdf

WQM 7.0.pdf