Pennsylvania Department of Environmental Protection

Northwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0263567**
Facility Type	**Industrial**	APS ID	**1140807**
Major / Minor	**Minor**	Authorization ID	**1532936**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**Ridgway Borough Elk County**	Facility Name	**Ridgway Borough WTP**
Applicant Address	P.O Box 149 108 Main Street	Facility Address	Big Mill Curn Reservoir Road
	Ridgway, PA 15853-0149		Ridgway, PA 15853
Applicant Contact	Josh Quattrone	Facility Contact	Josh Quattrone
Applicant Phone	(814) 772-6423	Facility Phone	(814) 772-6423
Client ID	66627	Site ID	615646
SIC Code	4941	Municipality	Ridgway Borough
SIC Description	Trans. & Utilities - Water Supply	County	Elk
Date Application Received	July 3, 2025	EPA Waived?	Yes
Date Application Accepted		If No, Reason	---

Purpose of Application: Renewal application for a minor industrial waste discharge

Summary of Review

On July 3, 2025, the Department received a renewal application for an Individual NPDES Permit No. PA0263567 that is set to expire on December 31, 2025. Ridgway WTP is a municipal water treatment plant that serves the borough of Ridgway, Pennsylvania. The facility has one outfall that discharges 0.029 MGD into Big Mill Creek (HQ-CWF). This discharge has existed since 1909 and was first permitted on March 1, 2010. Big Mill Creek became a special protection watershed in 1979. The facility is not subject to any ELGs.

The facility process is as follows: Wastewater is received by a clarifier from a sedimentation basin and filter backwash. The wastewater is combined with the discharge from the sludge thickening tank and then discharges to Outfall 001.Currently, there are no proposed changes to the treatment system in the next 5 years.

Act 14 notifications were submitted and received.

A Water Quality Management Permit is not required currently.

The site was last inspected on January 16, 2024, no violations were noted.

There are no open violations in WMS for the subject Client ID (66627) as of August 5, 2025.

Proposed changes since the last permit:

- Addition of a Daily Maximum TRC limit

Approve	Deny	Signatures	Date
X		Carlee Wilson Carlee Wilson / Environmental Engineering Trainee	October 28, 2025
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	November 13, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.029
Latitude	41º 25' 24.52"	Longitude	-78º 46' 40.02"
Quad Name	Portland Mills	Quad Code	0715
Wastewater Description:	IW Process Effluent without ELG		

Receiving Waters	Big Mill Creek (HQ-CWF)	Stream Code	50422
NHD Com ID	134396197	RMI	0.9100
Drainage Area	30.4	Yield (cfs/mi^2)	0.06
Q_{7-10} Flow (cfs)	1.85	Q_{7-10} Basis	USGS - StreamStats
Elevation (ft)	1404	Slope (ft/ft)	-
Watershed No.	17-A	Chapter 93 Class.	HQ-CWF
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	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	PA American Water Co. Clarion		
PWS Waters	Clarion River	Flow at Intake (cfs)	90.7
PWS RMI	33.3	Distance from Outfall (mi)	59.53

Changes Since Last Permit Issuance: Q_{7-10f} flow was updated using USGS-StreamStats. Using the new Q_{7-10} flow, a new yield was calculated.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Compliance History

DMR Data for Outfall 001 (from June 1, 2024, to May 31, 2025)

Parameter	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
Flow (MGD) Average Monthly	0.023	0.022	0.022	0.024	0.023	0.021	0.021	0.023	0.029	0.024	0.023	0.024
pH (S.U.) Instantaneous Minimum	6.8	6.8	6.6	6.4	6.5	6.5	7.1	6.9	6.5	7.0	7.0	6.9
pH (S.U.) Instantaneous Maximum	7.5	7.5	7.3	7.2	7.1	7.1	7.3	7.4	7.5	7.4	7.3	7.3
TRC (mg/L) Average Monthly	0.02	0.04	0.03	0.09	0.05	0.03	0.06	0.05	0.02	0.02	0.02	0.02
TRC (mg/L) Instantaneous Maximum	0.03	0.15	0.08	0.20	0.26	0.08	0.1	0.13	0.08	0.05	0.04	0.04
TSS (mg/L) Average Monthly	4.0	4.0	3.0	4.0	4.0	3.0	4.0	6.0	4.0	4.0	3.0	6.0
TSS (mg/L) Daily Maximum	5.0	5.0	3.0	5.0	5.0	3.0	5.0	8.0	4.0	5.0	3.0	8.0
Total Aluminum (mg/L) Average Monthly	0.47	0.5	0.20	0.17	0.21	0.27	0.959	0.7	0.38	0.56	0.47	0.93
Total Aluminum (mg/L) Daily Maximum	0.52	0.57	0.23	0.19	0.21	0.32	1.59	0.99	0.5	0.60	0.47	1.39
Total Iron (mg/L) Average Monthly	0.07	0.056	0.026	0.35	0.058	0.12	0.192	0.17	0.08	0.19	0.13	0.14
Total Iron (mg/L) Daily Maximum	0.08	0.057	0.029	0.35	0.058	0.18	0.28	0.23	0.11	0.22	0.18	0.19
Total Manganese (mg/L) Average Monthly	0.18	0.092	0.058	0.053	0.07	0.1	0.284	0.2	0.16	0.14	0.08	0.15
Total Manganese (mg/L) Daily Maximum	0.15	0.097	0.069	0.053	0.072	0.12	0.386	0.29	0.19	0.15	0.12	0.19

Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	.023
Latitude	41º 25' 25.00"	**Longitude**	-78º 46' 43.00"

Wastewater Description: IW Process Effluent without ELG

1. Technology-Based Limitations

The proposed technology-based limitations for wastewater from treatment of WTP sludges and filter backwash are based on the limitations listed in the table below found in DEPs *Technology-Based Control Requirements for Water Treatment Plant Wastes* document which is imposed under Best Professional Judgement under 40 CFR § 125.3. The effluent limitations from this document are displayed in Table 1.

pH requirements of 6.0 (minimum) and 9.0 S.U. (maximum) are required for all industrial waste processes according in 25 Pa. Code §§ 92a.48(a)(2) and 95.2). Flow monitoring is required pursuant to 25 Pa. Code § 92a.61(d)(1). Technology-based TRC limits are required by 25 Pa. Code § 92a.48(b) for facilities that use chlorination and are also calculated using the Department's TRC Calculation Spreadsheet. The limits for Aluminum, Iron, Manganese, and TSS are technology-based limits based on Chapter 93.7 and found in the DEPs *Technology-Based Control Requirements for Water Treatment Plant Wastes* document.

The Total Aluminum limits in the current permit are more stringent than the technology-based limits below and therefore, will be retained. The daily maximum limit for Total Residual Chlorine (TRC) has not previously been included in the permit but has been added to the proposed effluent limitations this cycle.

Table 1. BPT Limits for WTP Sludge and Filter Backwash Wastewater

Parameter	*Limit (mg/l)*	*SBC*
pH	6.0-9.0 at all times	Min-Max
Flow (MGD)	Monitor	Average Monthly
Total Suspended Solids	30	Average Monthly
	60	Daily Maximum
Total Iron	2	Average Monthly
	4	Daily Maximum
Total Aluminum	4	Average Monthly
	8	Daily Maximum
Total Manganese	1	Average Monthly
	2	Daily Maximum
Total Residual Chlorine	0.5	Average Monthly
	1.0	Daily Maximum

2. Water Quality-Based Limitations

As part of the reasonable potential analysis, the Toxics Management Spreadsheet was used to determine if there is a need to implement water quality-based effluent limitations for discharges of toxic pollutants. The model uses stream data and pollutant testing data from the permittee's outfall to determine if any water quality standards are in risk of non-compliance. Based on the original data received in the application, TMS recommended the following limits for Thallium: 0.01 mg/l (average monthly), 0.015 mg/l (daily maximum), and 0.025 mg/l (IMAX).

A pre-draft survey was sent to the permittee on August 7th, 2025. The permittee opted to conduct additional sampling for Thallium to supplement the application. On October 23, 2025, the test results were submitted, and all results were <0.001 mg/L. TMS was used again with the new data and no Thallium limits were recommended. Therefore, no new limits for Thallium will be proposed. This TMS spreadsheet is attached below as "Attachment 5".

3. Anti-Backsliding

Table 3. Current Permit Effluent Limitations for Outfall 001						
Parameter	**Effluent Limitations**					
	Mass Units (lbs/day) (1)		**Concentrations (mg/L)**			
	Average Monthly	**Average Weekly**	**Minimum**	**Average Monthly**	**Daily Maximum**	**Instant. Maximum**
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.6
Total Suspended Solids	XXX	XXX	XXX	30.0	60.0	75
Aluminum, Total	0.67	1.34 Daily Max	XXX	2.8	5.6	7.0
Iron, Total	XXX	XXX	XXX	2.0	4.0	5
Manganese, Total	XXX	XXX	XXX	1.0	2.0	2.5

Comments: The previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l) with the addition of a TRC daily maximum limit.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

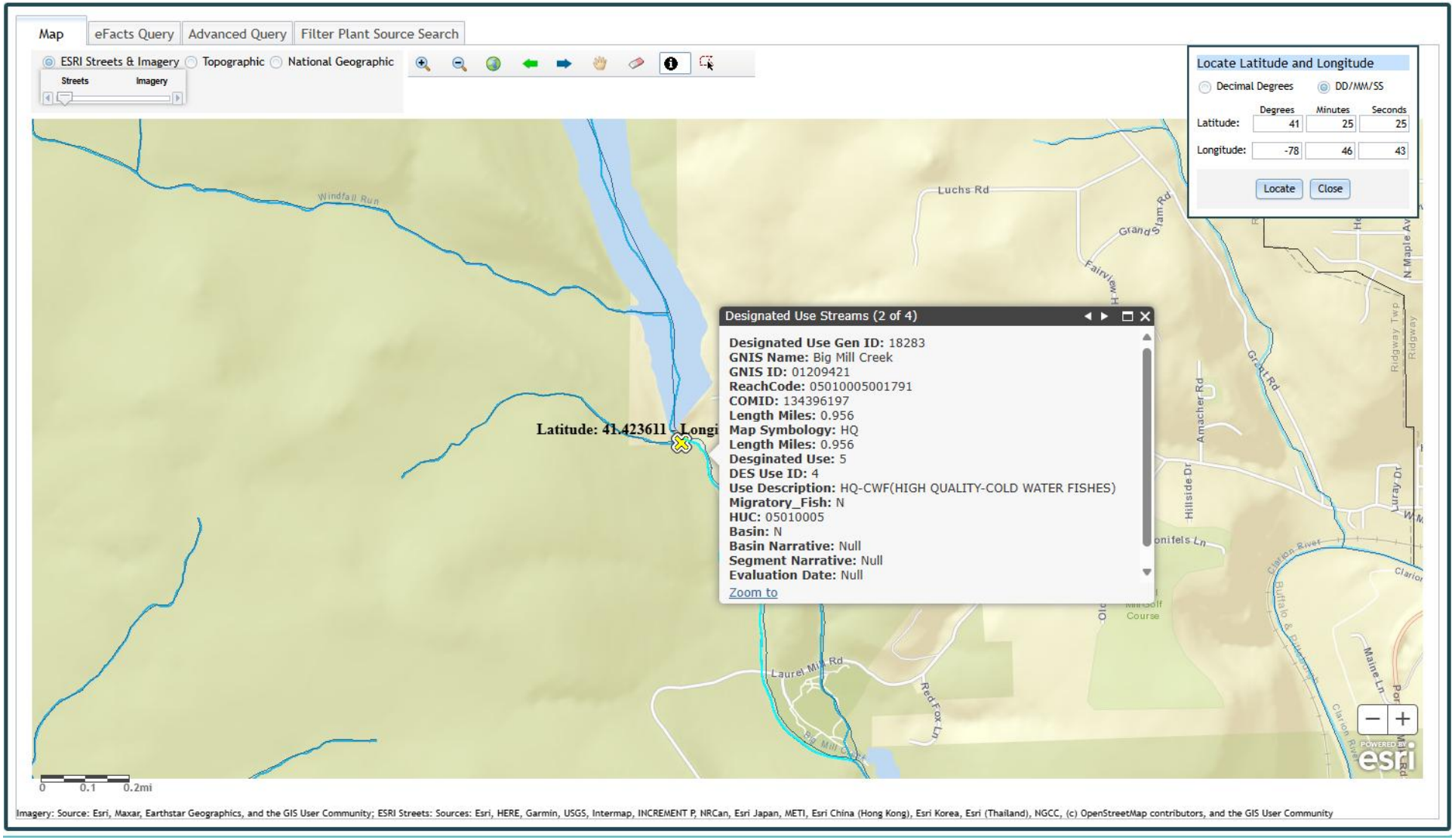
Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/day	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
TRC	XXX	XXX	XXX	0.5	1.0	1.6	1/day	Grab
TSS	XXX	XXX	XXX	30.0	60.0	75	2/month	Grab
Total Aluminum	0.67	1.34 Daily Max	XXX	2.8	5.6	7.0	2/month	Grab
Total Iron	XXX	XXX	XXX	2.0	4.0	5	2/month	Grab
Total Manganese	XXX	XXX	XXX	1.0	2.0	2.5	2/month	Grab

Compliance Sampling Location: Outfall 001

Other Comments: The limits for Flow, pH, TRC, TSS, Total Iron, and Total Manganese are based on Best Practicable Control Technology Available (BPT) from DEP guidance for Water Treatment Plant Wastes. Total Aluminum limits are based on modeling in a previous permit cycle.

eMapPA – Big Mill Creek Designated Use

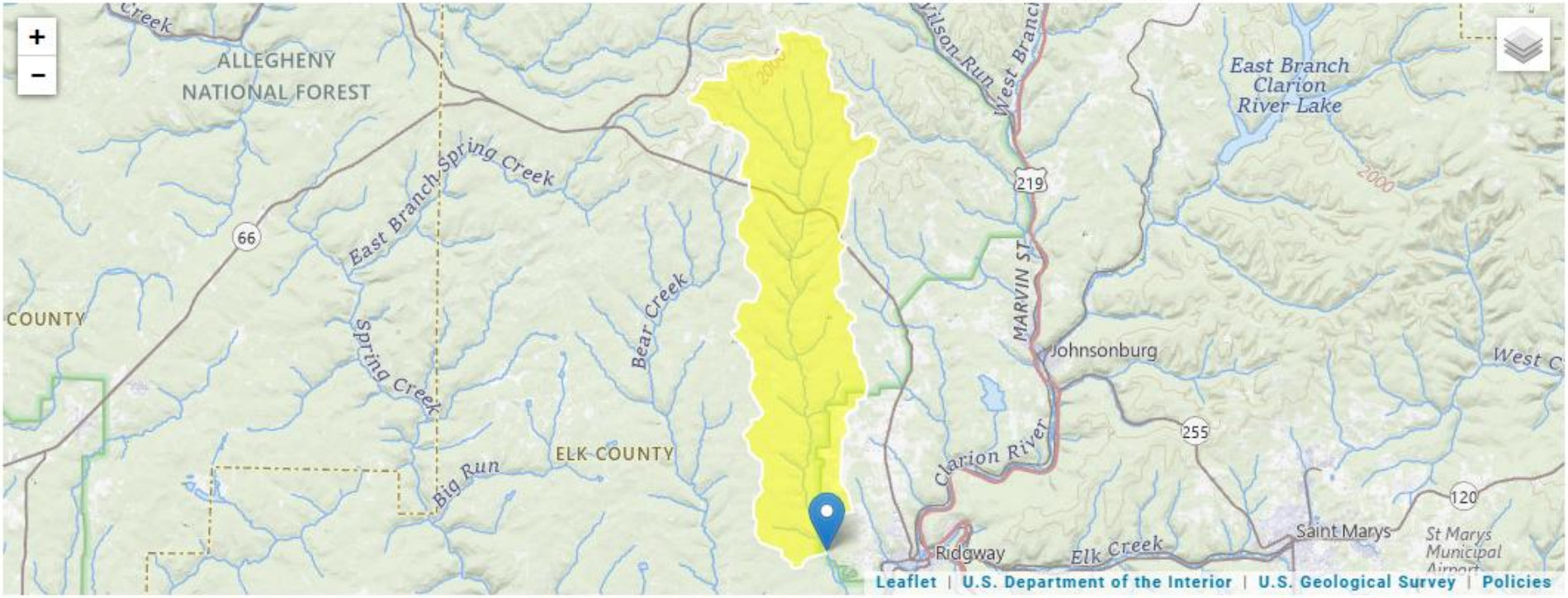


Attachment 2

USGS (StreamStats) –Drainage Details (Outfall 001)

StreamStats Report

Region ID:	PA
Workspace ID:	PA20250731182032878000
Clicked Point (Latitude, Longitude):	41.42360, -78.77807
Time:	2025-07-31 14:20:58 -0400



Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	30.4	square miles	2.33	1720
ELEV	Mean Basin Elevation	1768	feet	898	2700
PRECIP	Mean Annual Precipitation	44	inches	38.7	47.9

Low-Flow Statistics Flow Report [Low Flow Region 3]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	3.81	ft^3/s	43	43
30 Day 2 Year Low Flow	5.31	ft^3/s	38	38
7 Day 10 Year Low Flow	1.85	ft^3/s	54	54
30 Day 10 Year Low Flow	2.46	ft^3/s	49	49
90 Day 10 Year Low Flow	3.54	ft^3/s	41	41

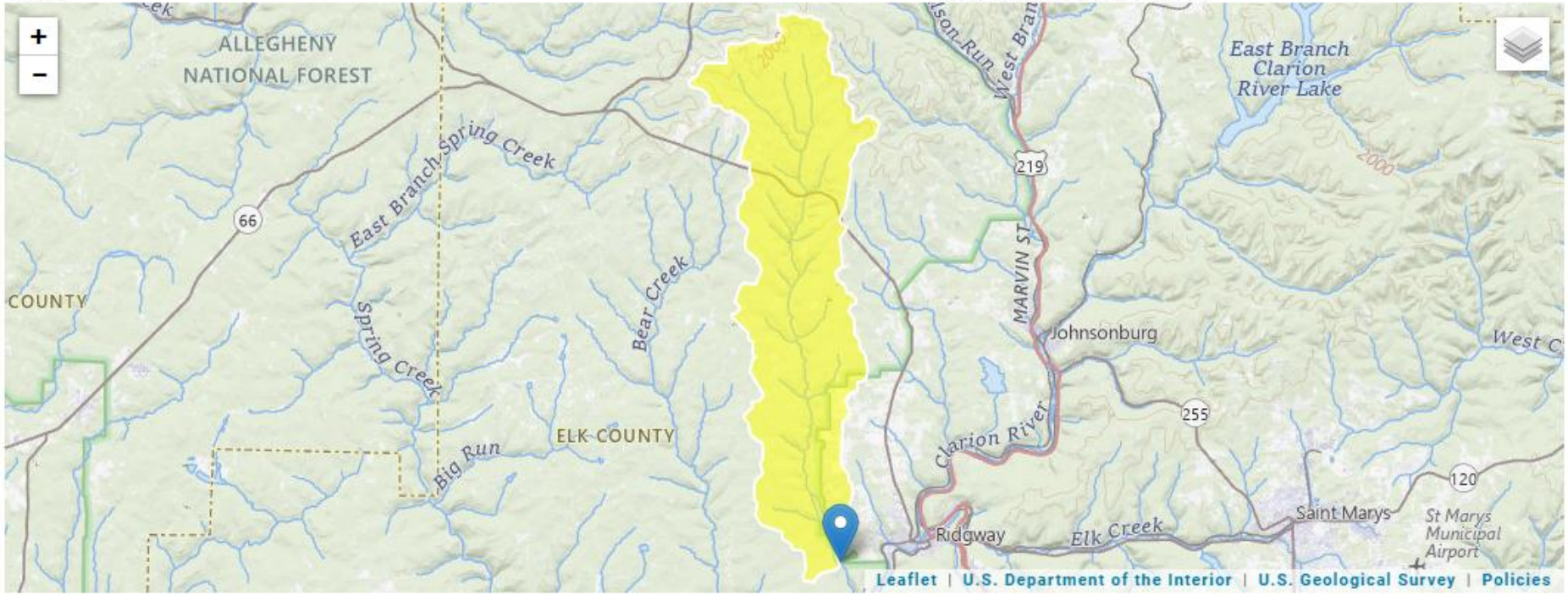
Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p.

Attachment 3
USGS (StreamStats) – Drainage Details (Endpoint)

StreamStats Report

Region ID:	PA
Workspace ID:	PA20250731182435077000
Clicked Point (Latitude, Longitude):	41.41312, -78.77182
Time:	2025-07-31 14:25:01 -0400



Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	31.5	square miles	2.33	1720
ELEV	Mean Basin Elevation	1762	feet	898	2700
PRECIP	Mean Annual Precipitation	44	inches	38.7	47.9

Low-Flow Statistics Flow Report [Low Flow Region 3]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	3.94	ft^3/s	43	43
30 Day 2 Year Low Flow	5.49	ft^3/s	38	38
7 Day 10 Year Low Flow	1.92	ft^3/s	54	54
30 Day 10 Year Low Flow	2.54	ft^3/s	49	49
90 Day 10 Year Low Flow	3.67	ft^3/s	41	41

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p.

Attachment 4
TRC Spreadsheet Results

TRC EVALUATION

1.85	= Q stream (cfs)	0.5	= CV Daily
0.023	= 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)
	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 16.605	1.3.2.iii	WLA cfc = 16.181
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 6.187	5.1d	LTA_cfc = 9.407

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500	BAT/BPJ
		INST MAX LIMIT (mg/l) = 1.635	

Attachment 5
TMS Spreadsheet

Discharge Information

Instructions | Discharge | Stream

Facility: Ridgway WTP NPDES Permit No.: PA0223051 Outfall No.: 001

Evaluation Type: Major Sewage / Industrial Waste Wastewater Description: Effluent

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
0.029	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		8									
	Chloride (PWS)	mg/L		13									
	Bromide	mg/L	<	0.03									
	Sulfate (PWS)	mg/L		5.46									
	Fluoride (PWS)	mg/L		0.18									
Group 2	Total Aluminum	µg/L		1590									
	Total Antimony	µg/L	<	16									
	Total Arsenic	µg/L	<	16									
	Total Barium	µg/L		25									
	Total Beryllium	µg/L	<	1									
	Total Boron	µg/L	<	12									
	Total Cadmium	µg/L	<	1									
	Total Chromium (III)	µg/L	<	3									
	Hexavalent Chromium	µg/L	<	18.2									
	Total Cobalt	µg/L	<	1.5									
	Total Copper	µg/L	<	8									
	Free Cyanide	µg/L											
	Total Cyanide	µg/L	<	5									
	Dissolved Iron	µg/L	<	8									
	Total Iron	µg/L		280									
	Total Lead	µg/L	<	7.1									
	Total Manganese	µg/L		710									
	Total Mercury	µg/L	<	0.087									
	Total Nickel	µg/L	<	2.1									
	Total Phenols (Phenolics) (PWS)	µg/L	<	10									
	Total Selenium	µg/L	<	16									
	Total Silver	µg/L	<	4									
	Total Thallium	mg/L	<	0.0001									
	Total Zinc	µg/L		5.8									
	Total Molybdenum	µg/L	<	2									
	Acrolein	µg/L	<										
	Acrylamide	µg/L	<										
	Acrylonitrile	µg/L	<										
	Benzene	µg/L	<										
	Bromoform	µg/L	<										

Stream / Surface Water Information

Ridgway WTP, NPDES Permit No. PA0223051, Outfall 001

Instructions | Discharge | Stream

Receiving Surface Water Name: Big Mill Creek

No. Reaches to Model: 1

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

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi²)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	050422	2.34	1404	30.4			Yes
End of Reach 1	050423	1.39	1382	31.5			Yes

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

Location	RMI	LFY (cfs/mi²)*	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	2.34	0.0608553										100	7		
End of Reach 1	1.39	0.0609524													

Q_h

Location	RMI	LFY (cfs/mi²)	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	2.34														
End of Reach 1	1.39														

Model Results

Ridgway WTP, NPDES Permit No. PA0223051, Outfall 001

Instructions | Results | RETURN TO INPUTS | SAVE AS PDF | PRINT | (•) All ( ) Inputs ( ) Results ( ) Limits

☐ *Hydrodynamics*

☑ *Wasteload Allocations*

☑ *AFC* CCT (min): 15 PMF: 0.811 Analysis Hardness (mg/l): 100 Analysis pH: 7.00

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	750	750	25,826	
Total Antimony	0	0		0	1,100	1,100	37,878	
Total Arsenic	0	0		0	340	340	11,708	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	723,121	
Total Boron	0	0		0	8,100	8,100	278,918	
Total Cadmium	0	0		0	2.014	2.13	73.5	Chem Translator of 0.944 applied
Total Chromium (III)	0	0		0	569.763	1,803	62,087	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	561	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	3,271	
Total Copper	0	0		0	13.439	14.0	482	Chem Translator of 0.96 applied
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	64.581	81.6	2,811	Chem Translator of 0.791 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	1.400	1.65	56.7	Chem Translator of 0.85 applied
Total Nickel	0	0		0	468.236	469	16,156	Chem Translator of 0.998 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	Chem Translator of 0.922 applied
Total Silver	0	0		0	3.217	3.78	130	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	2,238	
Total Zinc	0	0		0	117.180	120	4,126	Chem Translator of 0.978 applied

☑ *CFC* CCT (min): 22.818 PMF: 1 Analysis Hardness (mg/l): 100 Analysis pH: 7.00

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	220	220	9,292	
Total Arsenic	0	0		0	150	150	6,336	Chem Translator of 1 applied
Total Barium	0	0		0	4,100	4,100	173,170	
Total Boron	0	0		0	1,600	1,600	67,579	
Total Cadmium	0	0		0	0.246	0.27	11.4	Chem Translator of 0.909 applied
Total Chromium (III)	0	0		0	74.115	86.2	3,640	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	439	Chem Translator of 0.962 applied
Total Cobalt	0	0		0	19	19.0	802	
Total Copper	0	0		0	8.956	9.33	394	Chem Translator of 0.96 applied
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	1,500	1,500	63,355	WQC = 30 day average; PMF = 1
Total Lead	0	0		0	2.517	3.18	134	Chem Translator of 0.791 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.770	0.91	38.3	Chem Translator of 0.85 applied
Total Nickel	0	0		0	52.007	52.2	2,203	Chem Translator of 0.997 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	4.600	4.99	211	Chem Translator of 0.922 applied
Total Silver	0	0		0	N/A	N/A	N/A	Chem Translator of 1 applied
Total Thallium	0	0		0	13	13.0	549	
Total Zinc	0	0		0	118.139	120	5,061	Chem Translator of 0.986 applied

☑ *THH* CCT (min): 22.818 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	500,000	500,000	N/A	
Chloride (PWS)	0	0		0	250,000	250,000	N/A	
Sulfate (PWS)	0	0		0	250,000	250,000	N/A	
Fluoride (PWS)	0	0		0	2,000	2,000	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	5.6	5.6	237	
Total Arsenic	0	0		0	10	10.0	422	
Total Barium	0	0		0	2,400	2,400	101,368	
Total Boron	0	0		0	3,100	3,100	130,934	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	

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

No. Samples/Month: 4

Pollutants	*Mass Limits* AML (lbs/day)	MDL (lbs/day)	*Concentration Limits* AML	MDL	IMAX	Units	Governing WQBEL	WQBEL Basis	Comments

☑ ***Other Pollutants without Limits or Monitoring***

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

Pollutants	Governing WQBEL	Units	Comments
Total Dissolved Solids (PWS)	N/A	N/A	PWS Not Applicable
Chloride (PWS)	N/A	N/A	PWS Not Applicable
Bromide	N/A	N/A	No WQS
Sulfate (PWS)	N/A	N/A	PWS Not Applicable
Fluoride (PWS)	N/A	N/A	PWS Not Applicable
Total Aluminum	16,553	µg/L	Discharge Conc ≤ 10% WQBEL
Total Antimony	237	µg/L	Discharge Conc ≤ 10% WQBEL
Total Arsenic	422	µg/L	Discharge Conc ≤ 10% WQBEL
Total Barium	101,368	µg/L	Discharge Conc ≤ 10% WQBEL
Total Beryllium	N/A	N/A	No WQS
Total Boron	67,579	µg/L	Discharge Conc < TQL
Total Cadmium	11.4	µg/L	Discharge Conc ≤ 10% WQBEL
Total Chromium (III)	3,640	µg/L	Discharge Conc < TQL
Hexavalent Chromium	360	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cobalt	802	µg/L	Discharge Conc ≤ 10% WQBEL
Total Copper	309	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cyanide	N/A	N/A	No WQS
Dissolved Iron	12,671	µg/L	Discharge Conc < TQL
Total Iron	63,355	µg/L	Discharge Conc ≤ 10% WQBEL
Total Lead	134	µg/L	Discharge Conc ≤ 10% WQBEL
Total Manganese	42,237	µg/L	Discharge Conc ≤ 10% WQBEL
Total Mercury	2.11	µg/L	Discharge Conc < TQL
Total Nickel	2,203	µg/L	Discharge Conc < TQL
Total Phenols (Phenolics) (PWS)		µg/L	PWS Not Applicable
Total Selenium	211	µg/L	Discharge Conc ≤ 10% WQBEL
Total Silver	83.5	µg/L	Discharge Conc ≤ 10% WQBEL
Total Thallium	0.01	mg/L	Discharge Conc < TQL
Total Zinc	2,644	µg/L	Discharge Conc ≤ 10% WQBEL

Attachment 6
Google Earth – Aerial Site View

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☒	Toxics Management Spreadsheet (see Attachment **5**)
☒	TRC Model Spreadsheet (see Attachment **4**)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 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, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 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, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other: