Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0267031**
Facility Type	**Industrial**	APS ID	**1004176**
Major / Minor	**Minor**	Authorization ID	**1492485**

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

Applicant and Facility Information

Applicant Name	**Quincy Township**	Facility Name	**Quincy Township Water Well 7**
Applicant Address	7575 Mentzer Gap Road	Facility Address	8754 Tomstown Road
	Waynesboro, PA 17268-8946		Waynesboro, PA 17268-8927
Applicant Contact	Kenneth Myers	Facility Contact	Kenneth Myers
Applicant Phone	(717) 412-1408	Facility Phone	(717) 412-1408
Client ID	34864	Site ID	839567
SIC Code	1623	Municipality	Quincy Township
SIC Description	Construction - Water, Sewer, And Utility Lines	County	Franklin
Date Application Received	July 16, 2024	EPA Waived?	Yes
Date Application Accepted	July 18, 2024	If No, Reason	
Purpose of Application	NPDES Permit Renewal.		

Summary of Review

Quincy Township has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of an NPDES permit. The permit was originally issued on January 23, 2020 and became effective of February 1, 2020. The permit expired on January 31, 2025. The Township discharges groundwater (well water) from a backup water supply well for the Quincy Township Water System.

Based on the review, it is recommended that the permit be drafted.

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.

Approve	Deny	Signatures	Date
X		*Jinsu Kim* Jinsu Kim / Environmental Engineering Specialist	May 1, 2025
x		*Maria D. Bebenek* for Daniel W. Martin, P.E. / Environmental Engineer Manager	June 30, 2025
x		*Maria D. Bebenek* Maria D. Bebenek, P.E. / Program Manager	June 30, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.005
Latitude	39º 48' 43.31"	Longitude	-77º 33' 24.02"
Quad Name	Waynesboro	Quad Code	2025
Wastewater Description:	Groundwater Discharge		
Receiving Waters	Unnamed Tributary to West Branch Antietam Creek (CWF, MF)	Stream Code	59280
NHD Com ID	49481314	RMI	1.07
Drainage Area	0.61 sq.mi.	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	0.0408	Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	13-C	Chapter 93 Class.	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	Final	Name	West Branch Antietam Creek TMDL
Nearest Downstream Public Water Supply Intake	PA-MD State Border		
PWS Waters	Antietam Creek	Flow at Intake (cfs)	
PWS RMI	0.0	Distance from Outfall (mi)	9.0

Drainage Area
The discharge will be to an existing roadie swale that runs along Tomstown Road and then discharge into Unnamed Tributary to West Branch Antietam Creek at RM 1.07. A drainage area upstream of the confluence of this swale and surface water is estimated to be 0.61 sq.mi. using USGS StreamStats available at https://streamstats.usgs.gov/ss/.

Streamflow
USGS StreamStats produced a Q7-10 flow of 0.0408 cfs at the confluence of this swale and surface water.

Unnamed Tributary to West Branch Antietam Creek
Under 25 Pa Code §93.9z, the West Branch Antietam Creek basin including all tributaries from SR 997 bridge to confluence with East Branch is designated as cold water fishes and supports migratory fishes. No special protection water will be impacted by this discharge. No Class A Wild Trout fishery will be impacted by this discharge. DEP's latest integrated water quality report in 2024 indicates that the proposed discharge will be located in a stream segment of the Unnamed Tributary to West Branch Antietam Creek listed as attaining use(s).

Public Water Supply Intake
DEP's eMapPA available at http://www.depgis.state.pa.us/emappa/ does not indicate any public water supply intake system located downstream of the proposed discharge within the Commonwealth of PA. The PA-MD state border is located approximately 9 miles from the proposed discharge point. Given the distance, the proposed discharge is not expected to impact any downstream water supply intake.

Treatment Facility Summary

The permittee utilizes Well no. 7 as a backup water supply well for its water system based on the demand. An aquifer testing of this well has been completed and DEP issued a temporary discharge approval on June 8, 2016 for any discharge occurred during this testing. Raw water from Well no. 7 is used for water supply based on a turbidity level tested by an on-site turbidimeter. In early 2025, the permittee has completed construction of Well no. 7; as a result, the discharge only occurs upon start-up until the turbidity level declines. Specifically, the discharge occurs if the turbidity level of raw water is 4.5 NTU or higher. If the turbidity level of raw water is below 4.5 NTU, then, the permittee pumps the raw water from Well no. 7 to the water plant for potable water supply. A valve is available to control the raw water supply line based on the turbidity level. Based on correspondence with the permittee, the discharge occurs every other day for approximately 15 minutes and the discharge volume is about 2,000 gallons per day. The discharge is pumped through 4-inch waste line to a manhole and then discharged via 6-inch gravity line to a vegetated swale. There is a riprap placed at the end of Outfall 001 for E&S control. No chemical is used during this operation. No treatment of raw water discharge occurs at this time.

Compliance History	
Summary of DMRs:	A summary of 12-month DMR data is presented on the next page.
Summary of Inspections:	02/03/2021: DEP conducted an administrative inspection to follow up on a late monthly DMR submission. The delay in submission occurred due to a problem with internet connection.
Other Comments:	Since the last permit reissuance, the permittee had a number of permit violations mainly associated with late DMR submission. DEP's database revealed that there is no open violation associated with this permittee.

Effluent Data

DMR Data for Outfall 001 (from April 1, 2024 to March 31, 2025)

Parameter	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24
Flow (MGD) Average Monthly	6058	3873	0.0029	0.030	0.116			0.0006	0.027	0.0079	0.0219	0.22
Flow (MGD) Daily Maximum	10100	6500	0.0899	0.128	0.116			0.0006	0.027	0.0111	0.028	0.22
pH (S.U.) Instantaneous Minimum	7.07	7.28	7.61	7.53	7.36			7.38	E	8.1	7.59	E
pH (S.U.) Instantaneous Maximum	7.21	8.09	7.61	7.53	7.36			7.38	E	7.6	7.58	E
TSS (lbs/day) Average Monthly	0.126	< 1.30	3.0	0.75	0.967			< 1.60	< 1.6	GG	GG	E
TSS (lbs/day) Daily Maximum	0.151	< 1.60	3.0	3.2	0.967			< 1.60	< 1.6	GG	GG	E
TSS (mg/L) Average Monthly	2.5	0.043	0.072558	3.0	1.0			< 1.60	< 1.6	< 1.6	5	E
TSS (mg/L) Daily Maximum	3.0	0.076	0.072558	3.0	1.0			< 1.60	< 1.6	< 1.6	8.0	E
Total Dissolved Solids (lbs/day) Average Monthly	8.538	157	124	40.03	147.050			136	172	GG	GG	E
Total Dissolved Solids (lbs/day) Daily Maximum	9.80	160	124	170.8	147.050			136	172	GG	GG	E
Total Dissolved Solids (mg/L) Average Monthly	169	5.24	2.999	160	152			136	172	154	148	E
Total Dissolved Solids (mg/L) Daily Maximum	194	9.16	2.999	160	152			136	172	172	170	E
Total Aluminum (lbs/day) Average Monthly	0.0063	< 0.100	< 0.100	< 0.03	< 0.0967			< 0.100	< 0.100	GG	GG	E
Total Aluminum (lbs/day) Daily Maximum	0.0075	< 0.100	< 0.100	< 0.11	< 0.0967			< 0.100	< 0.100	GG	GG	E
Total Aluminum (mg/L) Average Monthly	0.124	0.003	0.0024	< 0.100	< 0.100			< 0.100	< 0.100	< 0.1	< 0.186	E

Parameter	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24
Total Aluminum (mg/L) Daily Maximum	0.148	0.006	1.0024	< 0.100	< 0.100			< 0.100	< 0.100	< 0.1	0.271	E
Total Iron (lbs/day) Average Monthly	< 0.010	< 0.200	0.200	0.16	0.200			< 0.200	< 0.200	GG	GG	E
Total Iron (lbs/day) Daily Maximum	< 0.010	< 0.200	0.200	0.67	0.200			< 0.200	< 0.200	GG	GG	E
Total Iron (mg/L) Average Monthly	< 0.200	0.007	0.0048	0.624	0.207			< 0.200	< 0.200	< 0.2	< 0.375	E
Total Iron (mg/L) Daily Maximum	< 0.200	0.012	0.0048	0.624	0.207			< 0.200	< 0.200	< 0.2	0.549	E
Total Lead (lbs/day) Average Monthly	< 0.00044	< 0.008	< 0.0080	< 0.01	< 0.0077			< 0.00800	< 0.00800	GG	GG	E
Total Lead (lbs/day) Daily Maximum	< 0.00044	< 0.008	< 0.0080	0.01	< 0.0077			< 0.00800	< 0.00800	GG	GG	E
Total Lead (mg/L) Average Monthly	< 0.00800	0.0003	0.0002	< 0.00800	< 0.00800			< 0.00800	< 0.00800	< 0.008	< 0.008	E
Total Lead (mg/L) Daily Maximum	< 0.00800	0.0005	0.0002	< 0.00800	< 0.00800			< 0.00800	< 0.00800	< 0.008	< 0.008	E
Total Zinc (lbs/day) Average Monthly	< 0.0010	< 0.02	0.0200	0.01	< 0.1934			< 0.200	< 0.0200	GG	GG	E
Total Zinc (lbs/day) Daily Maximum	< 0.0010	< 0.02	0.0020	0.02	< 0.1934			< 0.200	< 0.0200	GG	GG	E
Total Zinc (mg/L) Average Monthly	< 0.0200	0.0007	0.00004	< 0.0200	< 0.0200			< 0.200	< 0.200	< 0.02	< 0.02	E
Total Zinc (mg/L) Daily Maximum	< 0.0200	0.0011	0.00004	< 0.0200	< 0.0200			< 0.200	< 0.0200	< 0.02	< 0.02	E

Existing Effluent Limits and Monitoring Requirements

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) [1]		Concentrations (mg/L)				Minimum [2] Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	2/month	Grab
Total Suspended Solids	Report	Report	XXX	Report	Report	XXX	2/month	Grab
Total Dissolved Solids	Report	Report	XXX	Report	Report	XXX	2/month	Grab
Aluminum, Total	Report	Report	XXX	Report	Report	XXX	2/month	Grab
Iron, Total	Report	Report	XXX	Report	Report	XXX	2/month	Grab
Lead, Total	Report	Report	XXX	Report	Report	XXX	2/month	Grab
Zinc, Total	Report	Report	XXX	Report	Report	XXX	2/month	Grab

Development of Effluent Limitations and Monitoring Requirements

Outfall No. 001 **Design Flow (MGD)** 0.005
Latitude 39º 48' 43.31" **Longitude** -77º 33' 24.02"
Wastewater Description: Groundwater Discharge

General Discussion

This raw water, or groundwater, is non-processed and uncontaminated. There is no federal effluent limitations and guidelines (ELGs) available for this type of discharge and effluent BPT requirements listed in DEP's technical guidance no. are not applicable given that the discharge is not a water treatment waste. However, groundwater pulled from this well may contain certain pollutants at levels different from those typically identified in surface waters, potentially leading to a measurable change in water quality of the receiving stream. As a result, the development of effluent limits and monitoring requirements would be necessary for this discharge to ensure the protection of water quality in the receiving stream.

Permit Requirements

pH & Flow monitoring requirement

pH effluent limits of 6.0 (minimum) and 9.0 (maximum) are needed as per 25 Pa Code §95.2(1); therefore, no change will be made to pH effluent limits. The requirement to monitor for the volume of effluent discharged from Outfall 001 will also continue to be included in the permit in accordance with 40 CFR §122.44(1)(ii).

Total Suspended Solids

A routine monitoring requirement for Total Suspended Solids was included in the permit based on instream sample results and turbidity levels. A continuation of this monitoring requirement is recommended given that there has not any change to the main source of the discharge (i.e., raw water discharged based on turbidity level).

Other Pollutants

The last permit renewal included a routine monitoring requirement for metals, specifically Total Aluminum, Total Zinc, Total Lead, and Total Iron. The renewal also included a monitoring requirement for Total Dissolved Solids. These monitoring requirements were established based on sample results of groundwater pulled from Well no. 7 provided as part of the application package. Past DMRs have been summarized as follows (i.e., the discharge occurred since January 2024):

	Aluminum				**Iron**			
	Avg Mon (lbs/day)	Daily Max (lbs/day)	Avg Mon (mg/L)	Daily Max (mg/L)	Avg Mon (lbs/day)	Daily Max (lbs/day)	Avg Mon (mg/L)	Daily Max (mg/L)
Jan-24	E	E	E	E	E	E	E	E
Feb-24	< 0.100	< 0.100	0.1	< 0.100	< 0.200	< 0.200	< 0.200	< 0.200
Apr-24	E	E	E	E	E	E	E	E
May-24	GG	GG	< 0.186	0.271	GG	GG	< 0.375	0.549
Jun-24	GG	GG	< 0.1	< 0.1	GG	GG	< 0.2	< 0.2
Jul-24	< 0.100	< 0.100	< 0.100	< 0.100	< 0.200	< 0.200	< 0.200	< 0.200
Aug-24	< 0.100	< 0.100	< 0.100	< 0.100	< 0.200	< 0.200	< 0.200	< 0.200
Nov-24	< 0.0967	< 0.0967	< 0.100	< 0.100	0.2	0.2	0.207	0.207
Dec-24	< 0.03	< 0.11	< 0.100	< 0.100	0.16	0.67	0.624	0.624
Jan-25	< 0.100	< 0.100	0.0024	1.0024	0.2	0.2	0.0048	0.0048
Feb-25	< 0.100	< 0.100	0.003	0.006	< 0.200	< 0.200	0.007	0.012
Mar-25	0.0063	0.0075	0.124	0.148	< 0.010	< 0.010	< 0.200	< 0.200

	Lead				**Zinc**			
	Avg Mon (lbs/day)	Daily Max (lbs/day)	Avg Mon (mg/L)	Daily Max (mg/L)	Avg Mon (lbs/day)	Daily Max (lbs/day)	Avg Mon (mg/L)	Daily Max (mg/L)
Jan-24	E	E	E	E	E	E	E	E
Feb-24	< 0.00800	< 0.00800	0.008	< 0.00800	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Apr-24	E	E	E	E	E	E	E	E
May-24	GG	GG	< 0.008	< 0.008	GG	GG	< 0.02	< 0.02
Jun-24	GG	GG	< 0.008	< 0.008	GG	GG	< 0.02	< 0.02
Jul-24	< 0.00800	< 0.00800	< 0.00800	< 0.00800	< 0.0200	< 0.0200	< 0.200	< 0.0200
Aug-24	< 0.00800	< 0.00800	< 0.00800	< 0.00800	< 0.200	< 0.200	< 0.200	< 0.200
Nov-24	< 0.0077	< 0.0077	< 0.00800	< 0.00800	< 0.1934	< 0.1934	< 0.0200	< 0.0200
Dec-24	< 0.01	0.01	< 0.00800	< 0.00800	0.01	0.02	< 0.0200	< 0.0200
Jan-25	< 0.0080	< 0.0080	0.0002	0.0002	0.02	0.002	0.00004	0.00004
Feb-25	< 0.008	< 0.008	0.0003	0.0005	< 0.02	< 0.02	0.0007	0.0011
Mar-25	< 0.00044	< 0.00044	< 0.00800	< 0.00800	< 0.0010	< 0.0010	< 0.0200	< 0.0200

	Total Dissolved Solids			
	Avg Mon (lbs/day)	Daily Max (lbs/day)	Avg Mon (mg/L)	Daily Max (mg/L)
Jan-24	E	E	E	E
Feb-24	132	132	132	132
Apr-24	E	E	E	E
May-24	GG	GG	148	170
Jun-24	GG	GG	154	172
Jul-24	172	172	172	172
Aug-24	136	136	136	136
Nov-24	147.05	147.05	152	152
Dec-24	40.03	170.8	160	160
Jan-25	124	124	2.999	2.999
Feb-25	157	160	5.24	9.16
Mar-25	8.538	9.8	169	194

As shown above, effluent levels of metals are very low and most of them are below the water quality standards. DEP has therefore determined to remove the monitoring requirement for these metals. For Total Dissolved Solids, the monitoring requirement will continue to be included in the permit.

Sample Type and Monitoring Frequency

Given the expected duration of discharge (i.e., 2 to 3 hours), it is not reasonable to require composite; therefore, grab sampling requirement will continue to be included in the permit. Because the discharge volume has now significantly decreased (i.e., from 0.2 to 0.005 MGD), the monitoring frequency for the remaining parameters including pH, flow, TSS, and TDS has changed from 2/month to 1/month.

Other Consideration

DEP developed a Total Maximum Daily Load (TMDL) to address sediment and phosphorus impairments identified in the West Branch Antietam Creek watershed. The receiving stream is not however a part of this TMDL as the entire watershed of this receiving stream is attaining its designated use. Accordingly, no TMDL has been taken into consideration for this review.

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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Total Dissolved Solids	Report	Report	XXX	Report	Report	XXX	1/month	Grab
Total Suspended Solids	Report	Report	XXX	Report	Report	XXX	1/month	Grab

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	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: