Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0010294**
Facility Type	**Industrial**	APS ID	**882183**
Major / Minor	**Minor**	Authorization ID	**1466594**

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

Applicant and Facility Information

Applicant Name	**TE Connectivity Corporation**	Facility Name	**TE Connectivity Corporation (Formerly AMP Inc) Williamstown PA Facility**
Applicant Address	PO Box 3608 MS 140-055	Facility Address	700 W Broad Street
	Harrisburg, PA 17105-3608		Williamstown, PA 17098-1127
Applicant Contact	Tammy Hall	Facility Contact	Tammy Hall
Applicant Phone	(678) 428-6221	Facility Phone	(678) 428-3608
Client ID	78217	Site ID	443975
SIC Code	3643	Municipality	Williamstown Borough
SIC Description	Manufacturing - Current-Carrying Wiring Devices	County	Dauphin
Date Application Received	December 27, 2023	EPA Waived?	Yes
Date Application Accepted	January 4, 2024	If No, Reason	

Purpose of Application: Renewal of Individual NPDES Permit to Discharge Industrial Wastewater (GWCU)

Summary of Review

This is a renewal application of NPDES PA0010294 for TE Connectivity Corp (formerly Tyco Electronics Corporation and AMP Incorporated) in Williamstown Borough, Dauphin County. The permit is for the discharge of treated groundwater from a groundwater remediation system (GRS) installed to remove PCE and TCE from on-site groundwater. The single outfall (Outfall 002) is to Wiconisco Creek (WWF) in Williamstown Borough, Dauphin County.

In 1986, AMP began soil and groundwater investigations at the Williamstown manufacturing facility after discovering that chlorinated solvent was present in groundwater at the plant production well. The source of the solvent was determined to be spillage to the ground surface by the solvent supplier along the east side of the property.

The groundwater recovery and treatment system began operating in 1987 and is still operating at the site. Operations are expected to continue for 10 more years.

The property was sold in October 2002 to the current owner, Zemco Real Estate. The facility is currently active and operated by Zemco Tool & Die. TE Connectivity Corporation retains liability and responsibility for the ongoing groundwater remediation project.

Groundwater remediation is being conducted voluntarily under the supervision of the Pennsylvania Department of Environmental Protection (PADEP). TE Connectivity Corporation has operated the groundwater treatment plant in compliance with all required permits and continues to make progress in remediating groundwater.

Approve	Deny	Signatures	Date
x		*Brenda J Fruchtl* Brenda J. Fruchtl, P.G. / Licensed Professional Geologist	December 15, 2025
x		*Scott M Arwood* Scott M. Arwood, P.E. / Environmental Engineer Manager	12/17/2025

Summary of Review

Figure 1. **Topographic Map.** This figure shows the location of the site and location of discharge to Wiconisco Creek (Outfall 002) t. (Source: Figure 1 from the 12/23/2023 renewal application)

Figure 2. Site Layout. This figure shows details of the overall site including the location of the Treatment Building. (Source: Figure 2 from the 12/23/2023 renewal application)

Figure 3. **Water Balance – Line Diagram.** (Source: NPDES permit-line drawing Figure 2 from the 12/23/2023 renewal application)

Timeline of application

Currently, the facility is covered under NPDES Permit No PA0010294, which expired on June 30, 2024.

December 27, 2023 - The renewal application was received, which was considered timely; therefore, according to PA Code Title 25 §92a.7 (b), the terms and conditions of the expiring permit are automatically continued until a renewal can be issued.

January 2, 2024 – PADEP sent an incomplete email requesting Act 14 letters **(Attachment A)**.

January 4, 2024 – PADEP received an email with requested items **(Attachment B).** Ended Completeness Review.

March 3, 2025 – PADEP sent a Technical Deficiency (TD) email including the following questions / requests: asked if there have been any changes since application received on 12/27/2023; request for the 2023 Annual Groundwater Monitoring Report; and questions regarding the location of the GWTS and Outfall 002 **(Attachment C)**.

March 14, 2025 – PADEP received an email with responses to most of the questions in the 3/3/2025 TD email including the 2023 Annual Groundwater Monitoring Report; photos showing the location of the GWTS; and information about the flow from the GWTS to Wiconisco Creek **(Attachment D).**

March 20, 2025 – PADEP received an additional email responding to the 3/3/2025 TD email that provided additional information regarding the flow from the GWTS to the discharge to Wiconisco Creek and coordinates for Outfall 002 **(Attachment E).**

March 31, 2025 – Upon review of the 3/14/2025 and 3/20/2025 responses to the 3/3/2025 TD email, PADEP sent an email with some follow up questions / requests including: a site plan / map illustrating the entire pathway of the discharge from the GWTS to the discharge point on the stream; the influent and effluent sample locations; a schematic of the treatment system showing the influent and effluent sample ports; and explanation for flows on Table 4 not matching flows in Water Balance diagram **(Attachment F)**.

April 11, 2025 – Teams call with TE Connectivity (Kelly Dychdala, P.E., Highpoint Services) to discuss the remaining questions.

April 21, 2025 – PADEP received an email from TE Connectivity following up on the April 11, 2025 Teams call which included revised coordinates for the Outfall and images to further clarify the location of the treatment system and nearby township stormwater drain. **(Attachment G)**

December 9, 2025 – PADEP sent a follow up email to verify my interpretation of the responses discussed on 4/11/2025 to the questions posed in DEPs 3/31/2025 email as well requesting a response to my question in the 3/31/25 email about the discrepancy in the average flow listed in Table 4 of the permit application (screenshot included) and the attached NPDES Permit-line drawing. **(Attachment H)**

December 11, 2025 – PADEP received a response from TE Connectivity to the 12/9/2025 email agreeing with the Outfall 002 coordinates. Responses for the remaining questions are forthcoming. **(Attachment I)**

December 12, 2025 – PADEP received an additional email from AECOM responding to the remaining questions from the 12/9/2025 DEP Follow up email. **(Attachment J)**

Summary of Review

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.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	002	Design Flow (MGD)	0.086
Latitude	40º 34' 51.9024"	Longitude	-76º 37' 52.6764"
Wastewater Description:	Groundwater Cleanup Discharge		
Receiving Waters	Wiconisco Creek (WWF)	Stream Code	16895
NHD Com ID	54972297	RMI	33.2 (see comments)
Drainage Area	22.8*	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	3.63*	Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	6-C	Chapter 93 Class.	WWF
Assessment Status	Not Assessed		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Veolia Water PA Inc (Rockville Intake). Susquehanna Twp, Dauphin Co		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	61	Distance from Outfall (mi)	~55

*USGS StreamStats: Pennsylvania. (Basin Delineation from March 3, 2025)

Changes Since Last Permit Issuance:

- Per a discussion on 4/11/25, it was agreed to revise the location (and coordinates) of Outfall 002 to align with the corner of the GWTS building as illustrated in the below image:

Comments:

- Effluent samples are collected at the end of the treatment system after the dual air stripper towers prior to discharge at Outfall 002. (see **Figure 3** Water Balance – Line Diagram).
- The treated effluent exits the GWTS as Outfall 002 and then flows approximately 30 feet to the nearest stormwater drain located on the street at 765 N. Julian Street as seen in the image below:

- Wiconisco Creek is located approximately 1700 ft (0.31 miles) south of the discharge point at the stormwater drain.
- RMI 33.2 is the location where it is thought that the flow from the storm drain reaches Wiconisco Creek.

<u>Additional notes regarding updated location and coordinates for Outfall 002:</u>

- The coordinates listed in the application for Outfall 002 indicated the approximate location where the discharge from the storm drain is thought to enter Wiconisco Creek (see **Attachment E**).
- The Decimal Degrees shown on the image in the 4/21/25 follow up email to our 4/11/25 Teams call aligns with our agreed upon location of Outfall 002. However, the DMS coordinates typed in the 4/21/2025 follow up email were not converted correctly from the Decimal Degrees shown on the image (see **Attachment G**).
- Per the 12/11/25 email, it was agreed that the DMS coordinates for Outfall 002 are 40º 34’ 51.9024” / -76º 37’ 52.6764” (correctly converted from the Decimal coordinates shown on the image in the 4/21/25 email). **(**see **Attachment I)**

Treatment Facility Summary

Treatment Facility Name: TE Williamstown Groundwater Remediation System (GRS)

WQM Permit not issued for the treatment facility.

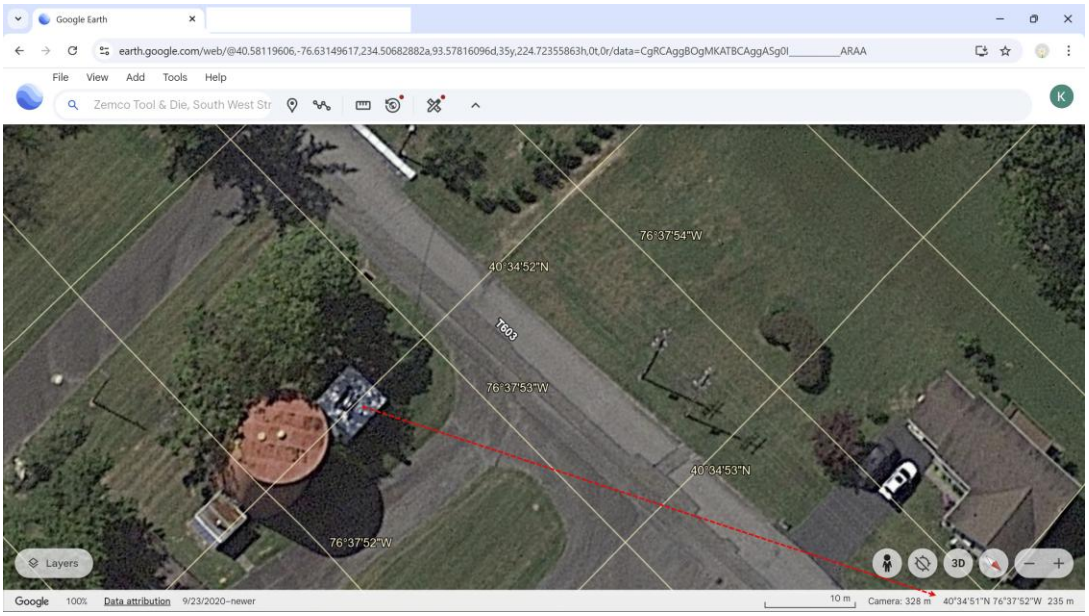
Dual AST (Design Flow Rate: 0.086 MGD)
Infiltration Trench (Design Flow Rate: 0.017 MGD)

The treatment facility currently extracts groundwater from six active recovery wells (R-1, R-2, R-4, R-5, R-7, and Barkos) located across the property and offsite and remediates the water via an air stripper tower (AST) system consisting of two towers in series.

An average flow rate of 35 gpm is treated by the AST system, with approximately 23 gpm being discharged to an onsite storm sewer manhole which flows to the Wiconisco Ck via Outfall 002; with the remaining 12 gpm of groundwater directed towards two infiltration trenches located at the site. The trenches are part of the remediation system and are designed to flush VOCs suspended in the shallow soil zone to the recovery well system.

See **Figure 2** Site Layout, **Figure 3** Water Balance – Line Diagram, and **Attachment D** for more details of the GWTS.

Updates: The coordinates for the facility were updated during this permit cycle to reflect the location of the GWTS: **40º 34' 51" / -76º 37' 52"**. The previous coordinates (40º 34' 35.0004" / -76º 37' 59.9988") incorrectly corresponded with the location where it was thought the discharge would eventually enter Wiconisco Creek via the stormwater sewer system. See below image:



Additives introduced into the groundwater or remediation system to improve treatment:
A permanganate solution has been used in the past to enhance recovery efforts. The same or similar additive may also be used during the upcoming permit coverage period. During this period of injection of the solution, the treatment system is not operating. Wells are inspected to ensure that the solution is dissipated prior to having the well(s) brought back online.

Since the treatment system is not operating when the additive is injected and is cleared out of the recovery wells prior to turning the system back on, it is not necessary to monitor for chemical additives in the effluent to Outfall 002.

Design flow is 0.086 MGD (Permit Application received 12/27/2023).

Average flow during production / operation is 0.040 MGD (Permit Application received 12/27/2023).

The Maximum flow during production / operation is listed as is 0.086 MGD (Permit Application received 12/27/2023).

Changes Since Last Permit Issuance: None

Compliance History	
Summary of DMRs: July 2019 to Dec 2025	DMRs are submitted as attachments to the Annual Remedial Reports submitted to DEP – Environmental Cleanup and Brownfield Program. DMRs are submitted quarterly via eDMR. Flow. Continuous Measured (period 3rd Quarter 2019 through 3rd Quarter 2025) • Max Flow ranged from 0.022 MGD (1st Qtr 2024) to 0.053 MGD (1st Quarter 2022) • Average Quarterly ranged from 0.028 MGD (3rd Qtr 2019) to 0.0645 MGD (3rd Qtr 2025) Tetrachloroethylene Limits: • **Average Quarterly Limit = 0.005 mg/L** ○ **Daily Max was exceeded the 2nd Quarter 2023 at <0.024 mg/L** ○ All other quarters were reported as <0.001 mg/L • **Daily Maximum Limit = 0.010 mg/L** ○ **Daily Max was exceeded the 2nd Quarter 2023 at 0.048 mg/L*** * Non-Compliance Report: May effluent sampling results were greater than permit limits. Extraction was halted on 6/5/2023 and PADEP notified per permit requirements. Investigation showed that the release was limited to a 3-hour period of equipment testing which occurred just prior to sampling, Normal system operation resumed after that period. Average quarterly value shown on the eDMR is the single exceedance divided by two as second confirmatory sampling on June 5th was ND (<0.001 ug/l). The extraction and treatment system were restarted on 6/21/2023. On 6/9/2023, a letter was sent to PADEP and receipt was acknowledge via emailed communication from PADEP. ○ All other quarters were reported as <0.001 mg/L Trichloroethylene Limits: • **Average Quarterly Limit = 0.005 mg/L** ○ No exceedances. All quarters were reported as <0.001 mg/L • **Daily Maximum Limit = 0.010 mg/L** ○ No exceedances. All quarters were reported as <0.001 mg/L pH. Limits: 6.0 and 9.0 S.U. • pH has ranged from **5.69** to 8.06 S.U. ○ **Minimum pH was reported as 5.69 S.U.* for the 2nd Quarter 2024**. This was the only instance that pH was reported below the minimum pH of 6.0 S.U. * Non-Compliance Report: The lower pH was exceeded. PADEP was contacted per the NPDES permit requirements and a follow-up letter was sent to PADEP. Resampling of the pH was within the permit limitations.
Summary of Inspections:	DEP conducted a site inspection on 9/27/2021. No violations were noted.
Summary of Violations:	• There have been no Clean Water Program violations related to this NPDES Permit No PA0010294 since the last renewal. • There are no Open Violations for Client 78217 TE Connectivity Corp (or Client 325818 TE Connectivity Corp), as of 12/12/2025.

Other Comments: The permit currently in effect does not include a requirement for Annual Reports.

Influent and Effluent Data

The following Tables summarize sample results from 2019 to 2023 (from the 12-27-2023 renewal application)**:**

Table 1
VOCs Detected in Remediation System Influent
TE Connectivity - Williamstown, PA
Five-Year Summary (2019-2023)

Date	1,1-DCA	1,1-DCE	PCE	cis-1,2-DCE	trans-1,2-DCE	Total 1,2-DCE	1,1,1-TCA	TCE	Other VOCs	Total VOCs	VOCs Running Average
02/01/19	<1	<1	300	<1	<1	<1	<1	<1	ND	300	365
06/10/19	<1	<1	569	<1	<1	<1	<1	<1	ND	569	430
08/30/19	<1	<1	391	<1	<1	<1	<1	<1	ND	391	403
11/15/19	<1	<1	275	<1	<1	<1	<1	<1	ND	275	384
02/24/20	<1	<1	<1	<1	<1	<1	<1	<1	ND	0	309
05/20/20	<1	<1	203	<1	<1	<1	<1	<1	ND	203	217
08/19/20	<1.0	<1.0	240	<1.0	<1.0	<1.0	<1.0	<1.0	ND	240	180
11/24/20	<1.0	<1.0	300	<1.0	<1.0	<1.0	<1.0	<1.0	ND	300	186
02/25/21	<1.0	<1.0	210	<1.0	<1.0	<1.0	<1.0	<1.0	ND	210	238
05/27/21	<1.0	<1.0	280	<1.0	<1.0	<1.0	<1.0	<1.0	ND	280	258
08/11/21	<1.0	<1.0	270	<1.0	<1.0	<1.0	<1.0	<1.0	ND	270	265
11/19/21	<1.0	<1.0	320	<1.0	<1.0	<1.0	<1.0	<1.0	ND	320	270
02/21/22	<1.0	<1.0	270	<1.0	<1.0	<1.0	<1.0	<1.0	ND	270	285
05/11/22	<1.0	<1.0	240	<1.0	<1.0	<1.0	<1.0	<1.0	ND	240	275
08/17/22	<1.0	<1.0	260	<1.0	<1.0	<1.0	<1.0	1.1	ND	261	273
11/02/22	<1.0	<1.0	260	<1.0	<1.0	<1.0	<1.0	<1.0	ND	260	258
02/21/23 **1**	<1.0	<1.0	160	<1.0	<1.0	<1.0	<1.0	<1.0	ND	160	230
05/24/23 **2**	<1.0	<1.0	260	<1.0	<1.0	<1.0	<1.0	<1.0	ND	260	235
06/05/23 **2**	<1.0	<1.0	210	<1.0	<1.0	<1.0	<1.0	<1.0	ND	210	230
07/17/23	<1.0	<1.0	280	<1.0	<1.0	<1.0	<1.0	<1.0	ND	280	234
10/27/23	<1.0	<1.0	260	<1.0	<1.0	<1.0	<1.0	<1.0	ND	260	234

All units in µg/L.
ND - Not detected.
1 Original sample collected on 2/8/23. Sample recollected on 2/21/23 due to non-detect result in the 2/8/23 Influent sample.
2 Regular NPDES sample collected 5/24/23. Confirmatory NPDES samples collected 6/5/23 due to PCE breakthrough identified in the 5/24/23 effluent sample.

Table 2
VOCs Detected in Remediation System Effluent
TE Connectivity - Williamstown, PA
Five-Year Summary (2019-2023)

Date	1,1-DCA	1,1-DCE	PCE	cis-1,2-DCE	trans-1,2-DCE	Total 1,2-DCE	1,1,1-TCA	TCE	Other VOCs	Total VOCs
02/28/19	NA	NA	<1	NA	NA	NA	NA	<1	ND	ND
06/10/19	NA	NA	<1.00	NA	NA	NA	NA	<1.00	ND	ND
08/30/19	NA	NA	<1.00	NA	NA	NA	NA	<1.00	ND	ND
11/15/19	NA	NA	<1.00	NA	NA	NA	NA	<1.00	ND	ND
02/25/20	NA	NA	<1.00	NA	NA	NA	NA	<1.00	ND	ND
05/19/20	NA	NA	<1.00	NA	NA	NA	NA	<1.00	ND	ND
08/19/20	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
11/24/20	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
05/27/21	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
02/25/21	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
05/27/21	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
08/11/21	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
11/19/21	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
02/21/22	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
05/11/22	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
08/17/22	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
11/02/22	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
02/21/23 **1**	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
05/24/23 **2**	NA	NA	48	NA	NA	NA	NA	<1.0	ND	48
06/05/23 **2**	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
07/17/23	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND
10/27/23	NA	NA	<1.0	NA	NA	NA	NA	<1.0	ND	ND

All units in µg/L.
NA - Not analyzed.
ND - Not detected.
1 Original sample collected on 2/8/23. Sample recollected on 2/21/23 due to non-detect result in the corresponding Influent sample.
2 PCE breakthrough identified in the 5/24/23 sample was the result of improper sampling measured while conducting system troubleshooting. Confirmatory samples collected on 6/5/23 upon breakthrough identification indicated no breakthrough was occurring. Appropriate PADEP notifications were made related to this incident.

Table 3
Summary of Additional NPDES Parameters in Remediation System Influent and Effluent
TE Connectivity - Williamstown, PA
October 27, 2023

Sample ID	Field pH	Lab pH	Total Suspended Solids	Dissolved Iron	Dissolved Lead	Dissolved Mercury	HEM (oil & grease)	Vinyl Chloride
	S.U.	S.U.	mg/L	ug/L	ug/L	ug/L	mg/L	ug/L
Act 2 MSC	---	---	NA	300	5	2	NA	2
AST-Influent	5.89	7.1 HF	<3.0	<52	<0.52	<0.20	<5.5	<1.0
AST-Effluent	6.72	7.8 HF	<3.0	<52	<0.52	<0.20	<5.6	<1.0
BD-01 (Influent)	NA	7.2 HF	<3.0	<52	<0.52	<0.20	<5.6	<1.0

Act 2 MSC - Act 2 Medium-Specific Concentration (MSCs) for Residential Used Aquifers with Total Dissolved Solids <2,500 mg/L.
NA - Not analyzed.
S.U. - Standard Units.
HF - Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Historic Remediation System Results can be found in the following tables included in the 2024 Annual Monitoring Report, Williamstown – Building 14, Dauphin County, Pennsylvania. June 2025**:**

- **Table B-1 Summary of VOCs Detected in Remediation System Influent.** 1990 through 2024. (2024 Annual Monitoring Report, Williamstown – Building 14, Dauphin County, Pennsylvania. June 2025).

- **Table B-2 Summary of VOCs Detected in Remediation System Effluent**. 1998 through 2024. (2024 Annual Monitoring Report, Williamstown – Building 14, Dauphin County, Pennsylvania. June 2025).

Development of Effluent Limitations

Outfall No. 002 **Design Flow (MGD)** .086
Latitude 40º 34' 35.00" **Longitude** -76º 38' 0.00"
Wastewater Description: Groundwater Cleanup Discharge

Water Quality-Based Limitations

The Toxics Management Spreadsheet (TMS), version 1.4, May 2025 was run on 12/11/2025 to determine an updated WQBEL, which was last determined on June 4, 1996 using *PENTOXSD, Release 1.0 Single discharge Wasteload Allocations for Toxics.* **(Attachment K)**.

Best Professional Judgment (BPJ) Limitations

According to the 1996 Fact Sheet:

> *Since a portion of the treated groundwater is diverted to a recirculation trench, it is appropriate to consider the need to apply groundwater protection limits to the outfall 002 discharge. The groundwater protection limits for both Tetrachloroethylene (PCE) and Trichloroethylene (TCE) are 5 ug/L. BAT for outfall 002 was established in the previous report at "not detectable using EPA method 601", which has an MDL of 0.03 ug/L for PCE and 0.12 ug/L for TCE.*

Since the purpose of the groundwater treatment system is to treat for both PCE and TCE, limits for both parameters will remain in the permit to evaluate the effectiveness of the treatment system. It was determined not to include Vinyl Chloride as "Report: as indicated in the 12/11/2025 TMS, since it hasn't been previously included and is not necessary to monitor effectiveness since both PCE and TCE are being monitored.

The permit limits were based on the more stringent of the WQBELs (from the1996 PENTOXSD and 2025 TMS) and Groundwater Protection Limits (using PA MCL/SMCLs and 25 PA Code §250 Appendix A Table 1 *Medium Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater - Used Aquifers; TDS ≤ 2500; R (Residential)*). See the table below for the comparison of these two criteria, as well as the 2019 permit limits and proposed 2025 permit limits.

	2019 NPDES Permit Limits Renewal			**Proposed 2025 NPDES Permit Limits Renewal**					
Parameter	*Ave Quarterly*	*Max Daily*	*Inst. Maximum*	**Ave Quarterly**	**Max Daily**	**Inst. Maximum**	**MSCs[1] MCLs/SMCLs[2]**	**WQBEL (1996)[3] (Ave Qrtly)**	**WQBEL (2025)[4] (Ave Qrtly)**
Flow (MGD)	*xxx*	*xxx*	*xxx*	**xxx**	**xxx**	**xxx**	n/a	---	---
pH (SU)	*From 6.0 to 9.0 inclusive*			**From 6.0 to 9.0 inclusive**			---	---	---
Tetrachloroethylene (mg/L)	*0.005*	*0.010*	*0.013*	**0.005**	0.010	**0.013**	0.005 [2]	0.051	1.741
Trichloroethylene (mg/L)	*0.005*	*0.010*	*0.013*	**0.005**	**0.010**	**0.013**	0.005 [2]	0.220	0.104

[1] Medium Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater. Used Aquifers; TDS ≤ 2500; R (Residential); M (Maximum Contaminant Level). (25 PA Code §250 Appendix A. Table 1).

[2] Maximum Contaminant Levels (MCLs) and Secondary MCLs (SMCLs). (25 PA Code Chapter 109 – see National Primary Drinking Water Regulations in 40 CFR Part 141 (relating to National Primary Drinking Water Regulations)). See Maximum Contaminant Levels, Maximum Residual Disinfectant Levels, and Treatment Technique Requirements fact sheet(opens in a new tab) (3930-FS-DEP5286)

[3] PENTOXSD, Release 1.0 Single discharge Wasteload Allocations for Toxics - run Jun 04, 1996

[4] Toxics Management Spreadsheet (TMS), Version 1.4, May 2025 – run 12/11/2025

After reviewing the past 4 years of DMRs, it was determined that the effluent limits from the previous permit are obtainable; therefore, the recommended effluent limits remain unchanged from the previous permit.

PROPOSED PART C SPECIAL CONDITIONS

Comments are provided at the end for any changes to the 2019 Special Conditions.

I. OTHER REQUIREMENTS

A. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance or replacement of all structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.

B. Collected screenings, slurries, sludges, and other solids shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land application, composting, processing, and storage of residual waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste, requirements for generators and transporters, and hazardous waste permit programs), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments. Screenings collected at intake structures shall be collected and managed and not be returned to the receiving waters.

The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport and disposal of solid waste materials generated as a result of wastewater treatment.

C. If the applicable standard or effluent guideline limitation relating to the application for Best Available Technology (BAT) Economically Achievable or to Best Conventional Technology (BCT) is developed by DEP or EPA for this type of industry, and if such standard or limitation is more stringent than the corresponding limitations of this permit (or if it controls pollutants not covered by this permit), DEP may modify or revoke and reissue the permit to conform with that standard or limitation. ***(see comment 1 below)***

D. The attention of the permittee is directed to the fact that effluent is discharged to a location with little or no assimilative capacity or dilution during critical periods. If the effluent creates a health hazard or nuisance, the permittee shall, upon notice from DEP, provide such additional treatment as may be required by DEP. ***(see comment 2 below)***

II. GROUNDWATER CLEANUP – AIR STRIPPER TOWER

A. If the applicable standard or effluent guideline limitation relating to the application for Best Available Technology Economically Achievable (BAT) or to Best Conventional Technology (BCT) is developed by the Department, or by EPA for this type of industry, and if such standard or limitation is more stringent than the corresponding conditions of this permit (or if it controls pollutants not covered by this permit), then the Department reserves the right to modify, or to revoke and reissue the permit to conform with that standard or limitation.

B. Sludges and other solids shall be handled and disposed of in compliance with 25 Pa. Code, Chapters 262, 263, and 264 (related to permits and requirements for landfilling and storage of hazardous sludge) and applicable federal regulations, the Federal Clean Water Act, RCRA and their amendments. The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport and disposal of solid waste materials generated as a result of wastewater treatment.

C. Summary reports providing groundwater quality data from quarterly events, semiannual water table elevation maps, and a narrative discussion including tables and maps shall be submitted annually to the Environmental Cleanup Program. The narrative report shall evaluate the overall operation of the system demonstrating its effectiveness in containing and remediating the contaminant plume. If modification to the operation is proposed, details must be submitted in the report. ***(see comment 3 below)***

D. There shall be no discharge of stripper tower cleaning wastewaters to waters of the Commonwealth. Cleaning wastewaters shall be discharged to the sanitary sewer or hauled off site for proper disposal.

E. The cleanup operation shall continue until a minimum of one year's data of the untreated groundwater and all monitoring wells (samples taken at least quarterly) have documented a concentration that is protective of the environment. The cleanup operation shall not be considered terminated until the permittee further documents for a minimum of one year after pumping has ceased (samples taken quarterly) that a concentration of pollutants protective of the environment has been maintained in the untreated groundwater and all monitoring wells. Written approval to terminate must be received from DEP's Clean Water Program prior to shut down. ***(see comment 3 below)***

F. The permittee shall operate the treatment facilities approved herein on a continual basis. If accidental breakdown or normal periodic maintenance should cause cessation of operation, the permittee shall take satisfactory measures to ensure the treatment works are placed back in operation at the earliest possible time. The permittee shall orally report to the Department within 24 hours of an unanticipated temporary shutdown of the treatment facility that is longer than 24 hours in duration or at least 24 hours prior to an anticipated maintenance shutdown. ***(see comment 3 below)***

G. Annual Report – The permittee shall submit a complete Groundwater Remediation System (GRS) Annual Report to the DEP office that issued the permit by June 1 (for the previous calendar year) using the GRS Annual Report template attached to this permit. The Annual Report shall address activities under the permit for the previous calendar year including groundwater quality data and any maintenance activities. If modification to the operation is proposed, details must be submitted along with the Annual Report. The permittee shall submit the Annual Report electronically if notified by DEP in writing. (25 Pa. Code § 92a.61(g)). ***(see comment 4 below)***

Comments regarding proposed changes to the 2019 Permit Part C Special Conditions

1. *This has been added. It is standard Part C language.*

2. *This has been added. It is the standard Part C language use for a dry stream discharge.*

3. *This has been added. It is standard Part C language for Groundwater cleanup (GWCU) sites and has been added to be consistent with other NPDES Permits for GWCU sites.*

4. *This has been added to be consistent with other NPDES Permits for GWCU sites. Annual Inspection reports are now routinely required for groundwater remediation systems.*

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.

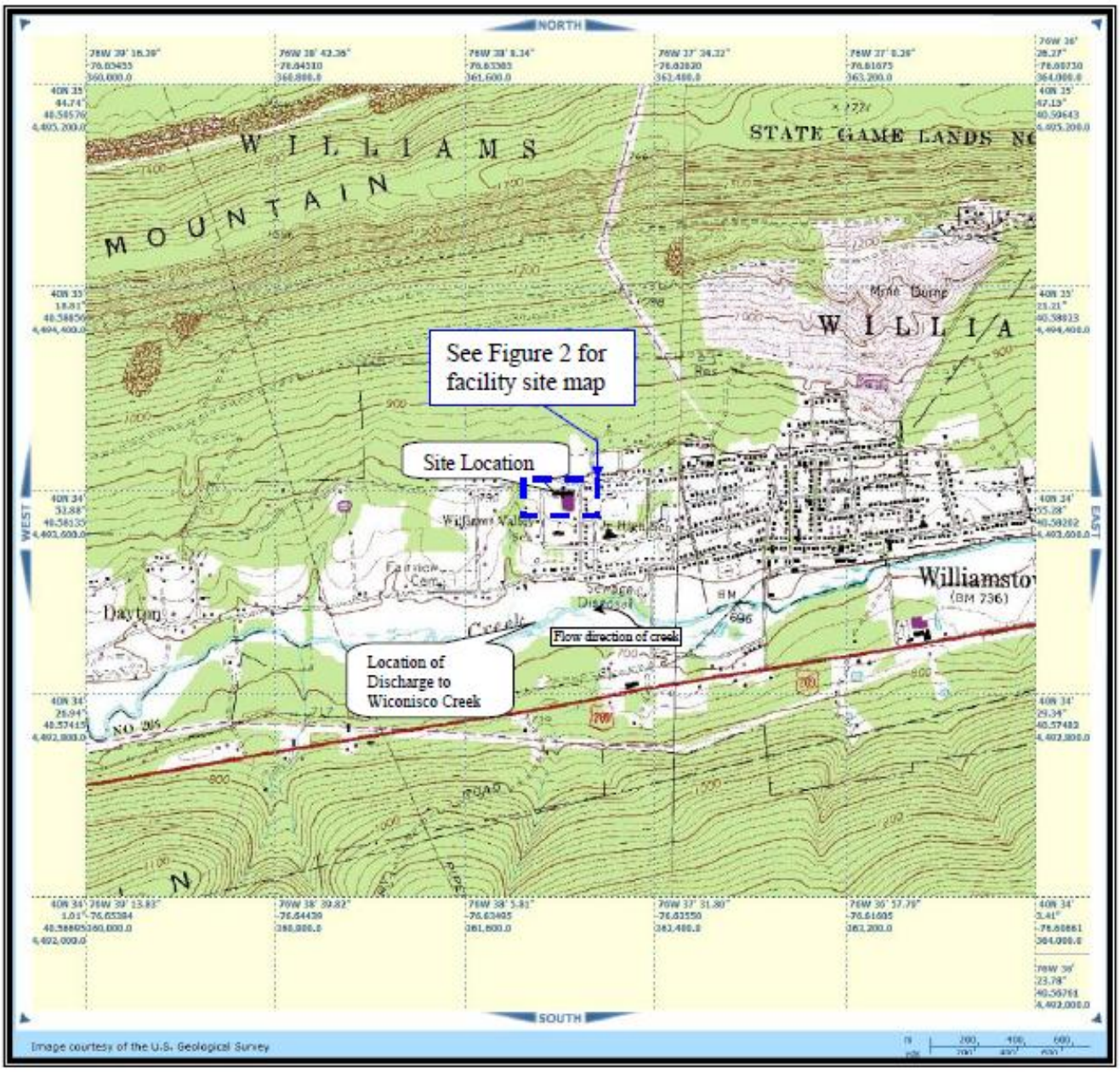
Outfall 002, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2)	Required
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Daily Maximum	Instant. Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report Avg Qrtly	Report Daily Max	XXX	XXX	XXX	XXX	See Permit	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/quarter	Grab
Tetrachloro-ethylene	XXX	XXX	XXX	0.005	0.010	0.013	1/quarter	Grab
Trichloroethylene	XXX	XXX	XXX	0.005	0.010	0.013	1/quarter	Grab

Compliance Sampling Location: Outfall 002

Other Comments: Effluent samples collected inside

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



7.5 Minute Quadrangles
Image courtesy of the U.S. Geological Survey
Williamstown, Pennsylvania, United States 7/1/1987

TYCO ELECTRONICS CORPORATION
GROUNDWATER REMEDIATION SYSTEM
WILLIAMSTOWN, PA
NPDES Permit No.: PA 0010294
Figure 1

Figure 1. Topographic Map. (Source: Figure 1 from the 12/23/2023 renewal application)

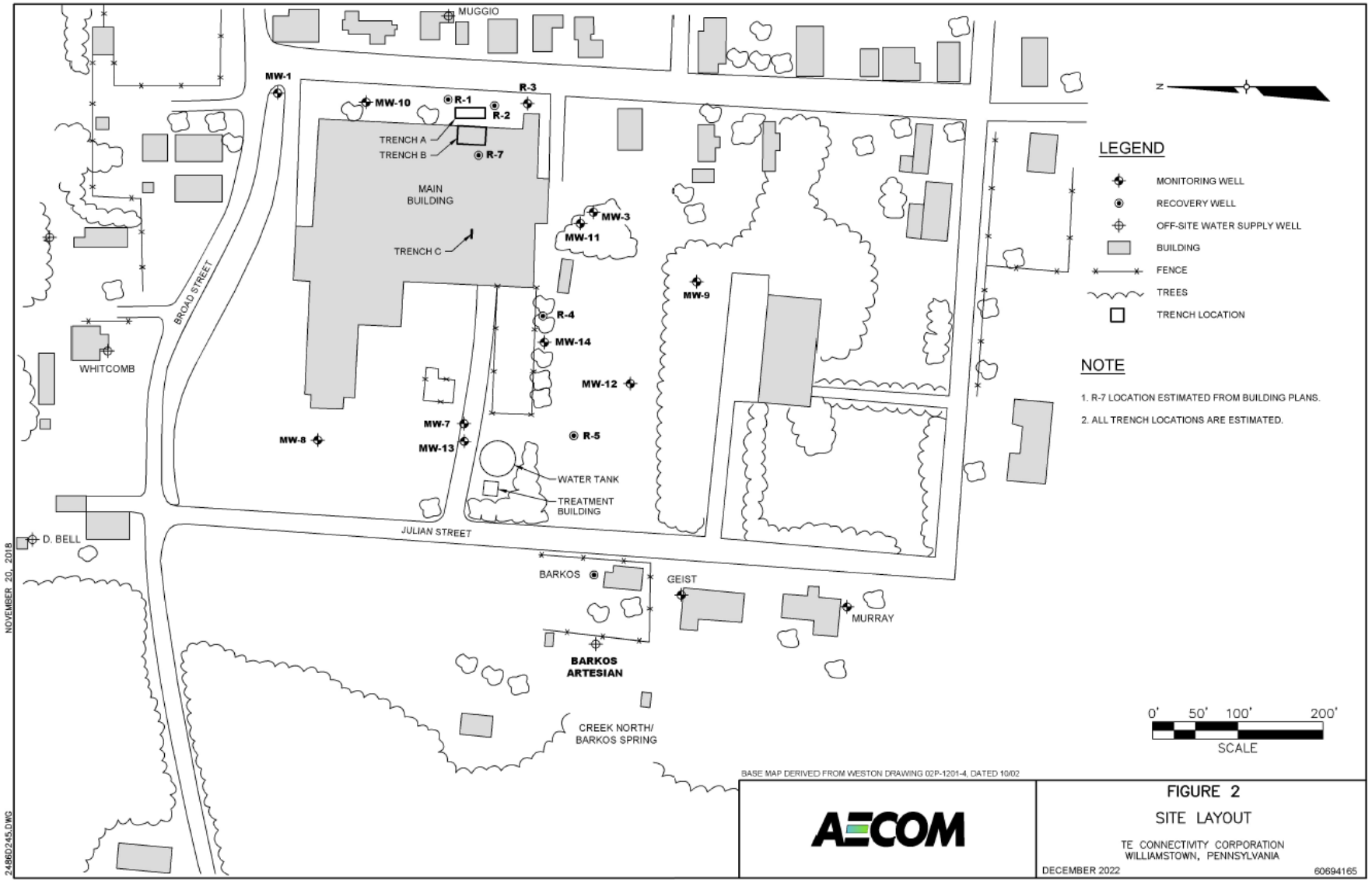


Figure 2. Site Layout. (Source: Figure 2 from the 12/23/2023 renewal application)

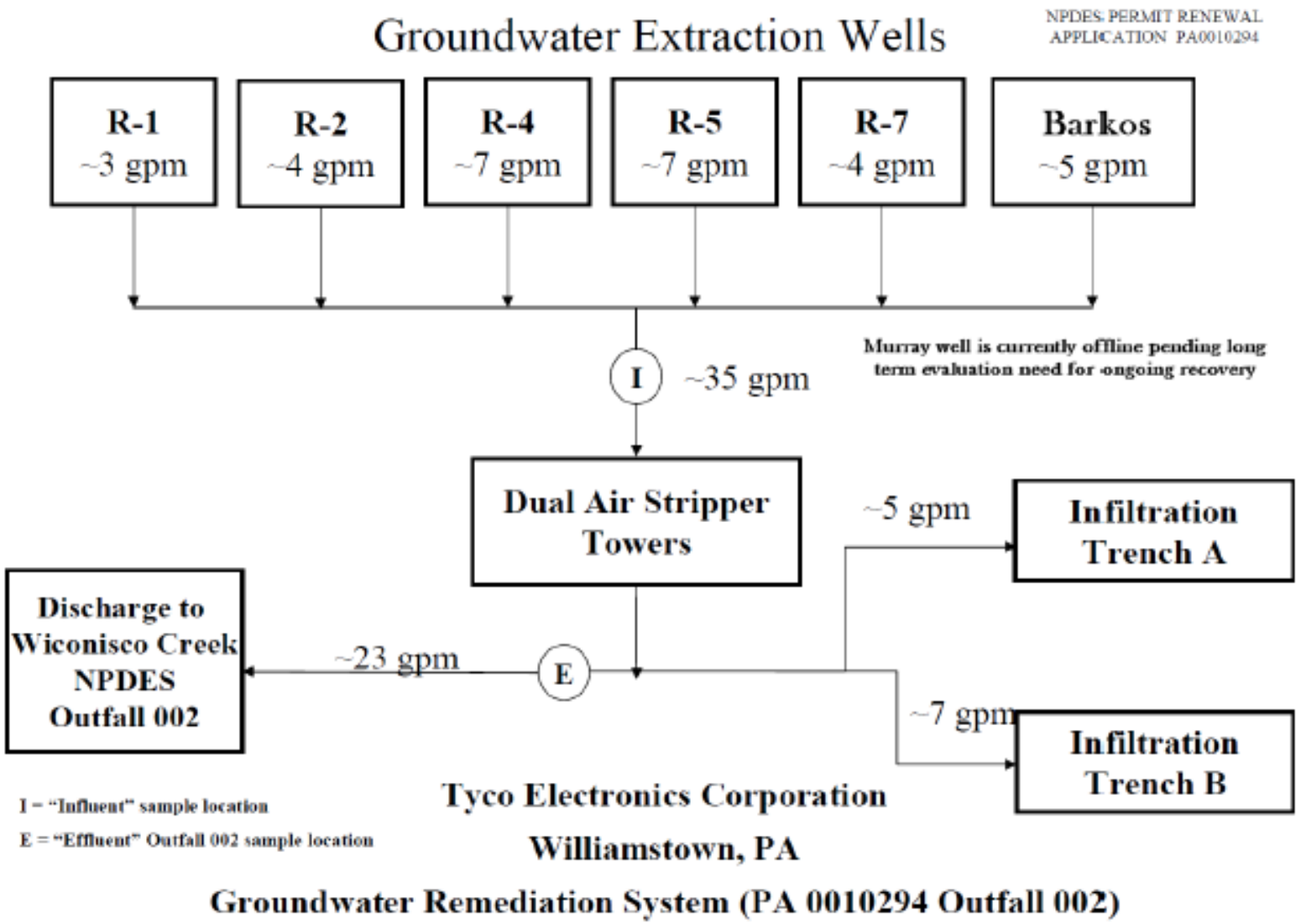


Figure 3. Water Balance – Line Diagram. (Source: NPDES permit-line drawing from 12/23/2023 renewal application

Attachments removed