pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0083305**
Facility Type	**Industrial**	APS ID	**943422**
Major / Minor	**Minor**	Authorization ID	**1186707**

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 - Brodbecks Bldg 06 Groundwater Treatment System**
Applicant Address	PO Box 3608 MS 038-34	Facility Address	Route 516 And Shaffers Church Road Brodbecks Bldg 06
	Harrisburg, PA 17105-3608		Brodbecks, PA 17329
Applicant Contact	Glen Foster	Facility Contact	
Applicant Phone	(717) 986-7916	Facility Phone	
Client ID	325818	Site ID	454895
SIC Code	3678	Municipality	Codorus Township
SIC Description	Manufacturing - Electronic Connectors	County	York
Date Application Received	June 6, 2017	EPA Waived?	Yes
Date Application Accepted	August 22, 2017	If No, Reason	

Purpose of Application: Renewal of Individual NPDES Permit to Discharge treated groundwater from a GWTS

Summary of Review

This is a renewal application of NPDES PA0083305 for TE Connectivity Corp (formerly Tyco Electronics Corporation and AMP Incorporated) in Codorus Township, York County for the discharge of treated groundwater from a groundwater treatment system (GWTS) which treats VOC-impacted site groundwater from 2 recovery wells (MW-3 and Well D) caused by former facility operations as part of a groundwater cleanup (GWCU).
Figure 1. Site Location Map
Figure 2. Site Layout, including the location of the GWTS, Outfall 001, and recovery wells.

Note: On January 1, 2017, the company name changed from Tyco Electronics Corporation to TE Connectivity Corporation. This was a name change only, and not a change in ownership. There were no changes to the site/facility name.

Currently the facility is covered under NPDES Permit No PA0083305, which expired November 30, 2017.
The renewal application was received on June 6, 2017.

July 31, 2017, PADEP sent an email requesting additional information including the following:

1. Copies of the Act 14 letters sent to the township and county
2. Corrected municipality on the GIF
3. Revised site plan showing location of the GWTS and Outfall 001.

August 21, 2017, the requested information was received.

December 17, 2019, as part of the Technical Review, PADEP sent an email requesting information on any changes that may have occurred since the renewal application was received June 6, 2017.

Approve	Deny	Signatures	Date
x		/s/ Brenda J. Fruchtl, P.G. / Licensed Professional Geologist	February 11, 2020
x		/s/ Scott M. Arwood, P.E. / Environmental Engineer Manager	March 2, 2020

Summary of Review

December 26, 2019, PADEP received response that there have been no changes to the wells being pumped, rates, or the treatment system. They attached the historical influent and effluent tables, which included the quarterly data for 2019.

Treatment began in 1988. It is expected to continue until standards can be achieved, which is estimated to be 8 years. TE Connectivity Corporation (TEC) sold the Brodbecks property to Timothy G. Shultz on May 12, 2005. TEC retains environmental liability the remediation project at the site.

TEC (formerly AMP) first conducted a groundwater remediation program at this facility under a Pennsylvania Administrative Order dated 21 August 1990. In January 2000, TEC submitted a NIR to enter into the Act 2 Program. Per the intent of the Act, acceptance of the NIR by PADEP, fulfilled and, in effect, made null and void the limitations and obligations set forth in the Administrative Order. The existing remediation strategy that TEC has been conducting at this facility continues under this voluntary program with PADEP oversight to achieve the Act 2 Statewide Health Standards (SHS).

TEC continues to submit Annual Groundwater Monitoring Reports to the PADEP – Environmental Cleanup Program.

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.	001	Design Flow (MGD)	.057
Latitude	39º 47' 0.00"	Longitude	-76º 48' 36.00"
Wastewater Description:	Groundwater Cleanup Discharge		
Receiving Waters[1]	Unnamed Tributary to South Branch Codorus Creek (WWF, MF); aka Krebs Valley Run	Stream Code	08164
NHD Com ID	57474933	RMI	3.9000
Drainage Area (mi^2)	0.35*	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	0.05*	Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-H	Chapter 93 Class.	WWF, MF
Assessment Status	Impaired		
Cause(s) of Impairment	FLOW REGIME MODIFICATION, SILTATION		
Source(s) of Impairment	AGRICULTURE, AGRICULTURE		
TMDL Status	Final	Name	South Branch Codorus Creek
Nearest Downstream Public Water Supply Intake	The York Water Company		
PWS Waters	South Branch Codorus Ck	Location	Spring Garden Township, York County
PWS RMI	0.30	Distance from Outfall (mi)	19 miles

*USGS StreamStats: Pennsylvania. (Basin Delineation[1] from December 17, 2019, see Figure 3)

Changes Since Last Permit Issuance: none

[1]Distance from discharge at Outfall 001 to Krebs Valley Run (receiving water) is approximately 0.4 miles via a drainage swale. Basin Delineation and Receiving water information in above table is based on the location where the dry stream enters Krebs Valley Run at RMI 3.900.

Treatment Facility Summary
Treatment Facility Name: TE Connectivity Corporation - Brodbecks Building 06 Groundwater Treatment System (GWTS) WQM Permit not issued for the treatment facility. Dual AST (Maximum Design Flow Rate: 0.0576 MGD) A groundwater treatment system (GWTS) is located at the site, which treats VOC-impacted site groundwater caused by former facility operations. The treatment facility currently extracts groundwater from two recovery wells (MW-3 and Well D) and remediates the water via an air-stripper tower (AST) system consisting of two towers in series at a rate of approximately 16 gpm prior to discharge into an unnamed tributary of Krebs Valley Run that ultimately discharges to the South Branch of Codorus Creek. Figure 4. Line Diagram for the GWTS. Any debris/backwash/sludge from the system will be drummed, sampled and disposed of properly. No onsite release of backwash or cleaning wastewaters will be conducted.

Changes Since Last Permit Issuance: Removal of Well I as one of the recovery wells. There are currently only 2 recovery wells, MW-3 and Well D).

Compliance History	
Summary of DMRs:	A single annual DMR is submitted as attachments to the Annual Remedial Reports submitted to DEP – Environmental Cleanup and Brownfield Program. Annual Remedial Reports were located for 2015 and 2018. *Note: The sampling frequency is 1/quarter; however, only one result was reported on a single annual DMR attached to the Annual Report.* Quarterly results are reported on Table B-2: Summary of VOCs Detected in Remedial Tower Effluent Samples included in the Annual Remedial Report. It is assumed the results reported are instantaneous maximum (IMAX) results. Table B-2 does not provide results for pH or Flow. A monthly eDMR was submitted for the month of November 2014 and a quarterly eDMR for the fourth quarter of 2014 and an annual eDMR for 2015. On June 21, 2018, a letter was sent to the permittee notifying them of the requirement to register for eDMR and requesting that they register for eDMR. <u>DMR results for 2015 and 2018</u> **Tetrachloroethylene** was reported as <0.005 mg/L for Daily Max (2015 and 2018) **pH** was consistently between 5.0 and 9.0 SU (6.06 min in 2015; 5.8 min in 2018) **Daily Max Flow** was reported as 0.028 MGD (2015) and 0.034 MGD (2018) **Average Monthly Flow** was reported as 0.022 MGD (2015) and 0.028 MGD (2018). **Average Flow** was 0.025 MGD (per the application received June 6, 2017) No permit limits were exceeded in the past 5 years.
Summary of Inspections:	DEP conducted a site inspection on September 23, 2015 by the PADEP Environmental Cleanup Program. No violations were noted.

Other Comments: There have been no violations reported for this facility since the last renewal. There are not any open violations for the facility

Historical influent and effluent data is provided in the following tables (see Attachment A):

- Table B-1: Summary of VOCs Detected in Remedial Tower Influent Samples. TE Connectivity – Brodbecks, PA. (PDF received 12/26/2019 via email)
- Table B-2 Summary of VOCs Detected in Remedial Tower Effluent Samples. TE Connectivity – Brodbecks, PA. (PDF received 12/26/2019 via email)

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .057
Latitude 39º 47' 0.00" **Longitude** -76º 48' 36.00"
Wastewater Description: Groundwater Cleanup Discharge

Best Professional Judgment (BPJ) Limitations

The following volatiles are sampled quarterly in the influent to the remedial tower: Chloroform; 1,2-Dichloroethane (1,2-DCA); Methylene Chloride; Tetrachloroethylene (PCE); 1,1,1-Trichloroethane (1,1,1-TCA); Trichloroethylene (TCE); and 1,1,2-Trichloroethane (1,1,2-TCA).
Tetrachloroethylene (PCE) is the only volatile detected in the quarterly influent samples since the permit was last renewed in 2012.

Since the purpose of the groundwater treatment system is to treat for PCE, limits for PCE will remain in the permit to evaluate the effectiveness of the treatment system.

It is recommended that the effluent limitations remain the same for Tetrachloroethylene (PCE). The Daily Maximum effluent limitation for PCE is equal to the Maximum Contaminant Level (MCL) for PCE of 0.005 mg/L in order to protect groundwater since Outfall 001 discharges to a dry swale prior to entering Krebs Valley Run approximately 0.4 miles away. The facility has not had any issues with obtaining the current limit of 0.005 mg/L for PCE.

It is recommended that pH limits be revised to reflect PA Code 25 §95.2 stating wastes must have a pH of not less than 6 and not greater than 9.

Comparison of Criteria and Limits for TE Connectivity Corp Brodbecks Facility (PA 0083305) permit renewal

	2012 NPDES Permit Limits Renewal			**Proposed 2019 NPDES Permit Limits Renewal**			
Parameter	*Ave Monthly*	*Max Daily*	*Inst. Maximum*	**Ave Quarterly**	**Max Daily**	**Inst. Maximum**	**Basis of Limit**
Flow (MGD)	*Report*	*Report*	*xxx*	**Report**	**Report**	**xxx**	n/a
pH (SU)	*From 5.0 to 9.0 inclusive*			**From 6.0 to 9.0 inclusive****			25 § 95.2
Tetrachloroethylene (mg/L)	*xxx*	*0.005*	*xxx*	**xxx**	**0.005**	**0.005**	MCL*

** from April 2006 MCLs*
***change from 2012 NPDES Permit.*

DMRs / eDMR

Currently, in lieu of submitting quarterly DMRs to the Clean Water Program, the Part C Special Condition states:

> *Discharge Monitoring Reports shall be submitted as attachments to the annual remediation reports to the Department's Environmental Cleanup and Brownfields Program. A copy of the report should be forwarded to the Clean Water Program's Permits Section.*

The annual remedial reports submitted to the PADEP Environmental Cleanup Program are filed in the ECU, Special Projects section under Amp Brodbecks (and not in the CW Reports or DMR files).

For the proposed permit, the Department is requiring that quarterly sample results be submitted via eDMR.
The U.S. Environmental Protection Agency (EPA) published the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule ("eReporting Rule") in the Federal Register on October 22, 2015. The eReporting Rule amended EPA's NPDES regulations at 40 CFR § 122.41(l)(4)(i) to require the submission of Discharge Monitoring Reports (DMRs) electronically by December 21, 2016.

PROPOSED PART C SPECIAL CONDITIONS

Note: Part C, I. B is the only Part C Condition in the current permit in addition to the DMR Special Condition noted above regarding DMRs, which has been removed in the proposed Draft Permit.

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.

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. 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.

D. 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.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

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

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

Compliance Sampling Location: Outfall 001

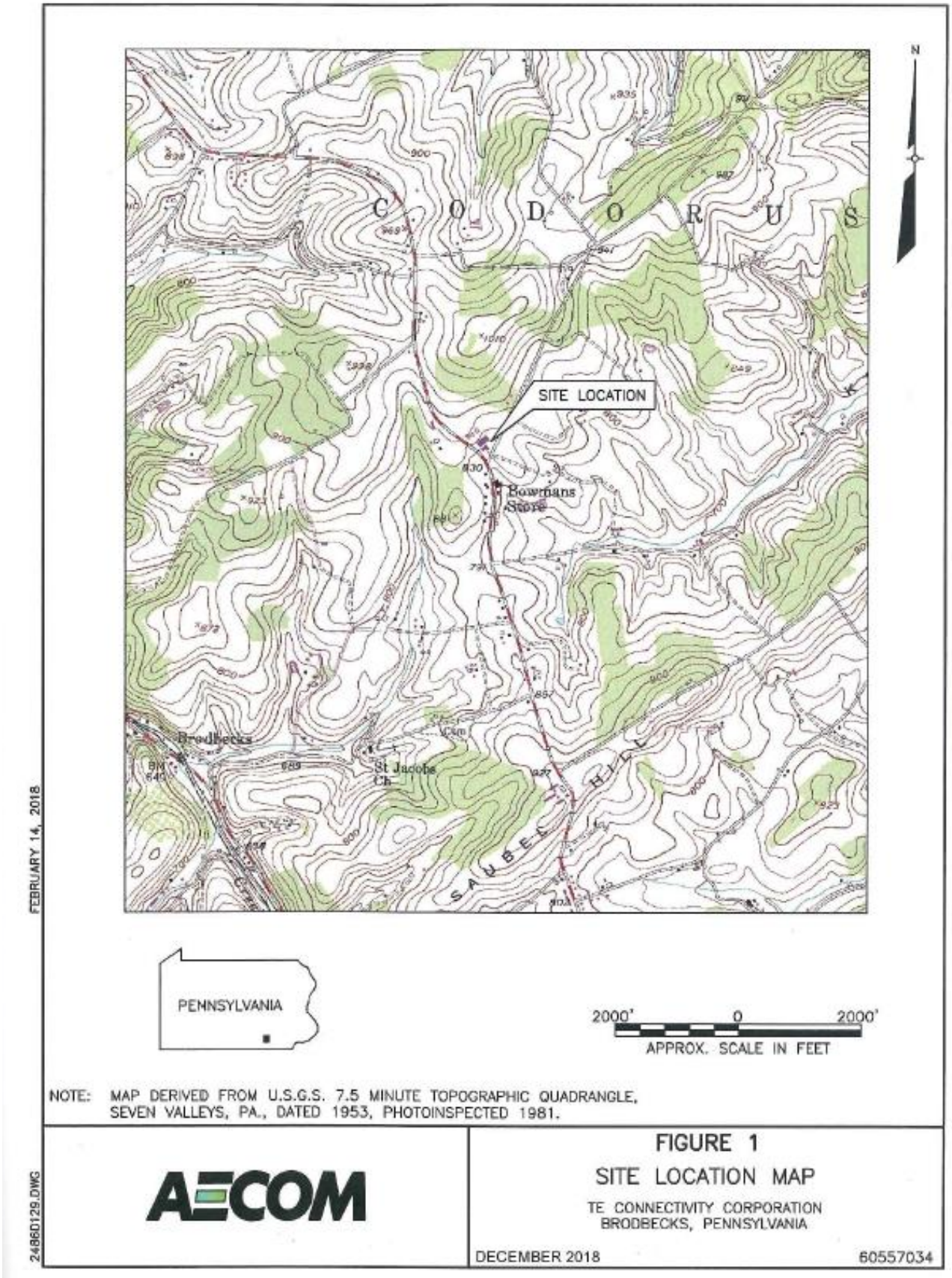

Figure 1. Site Location Map

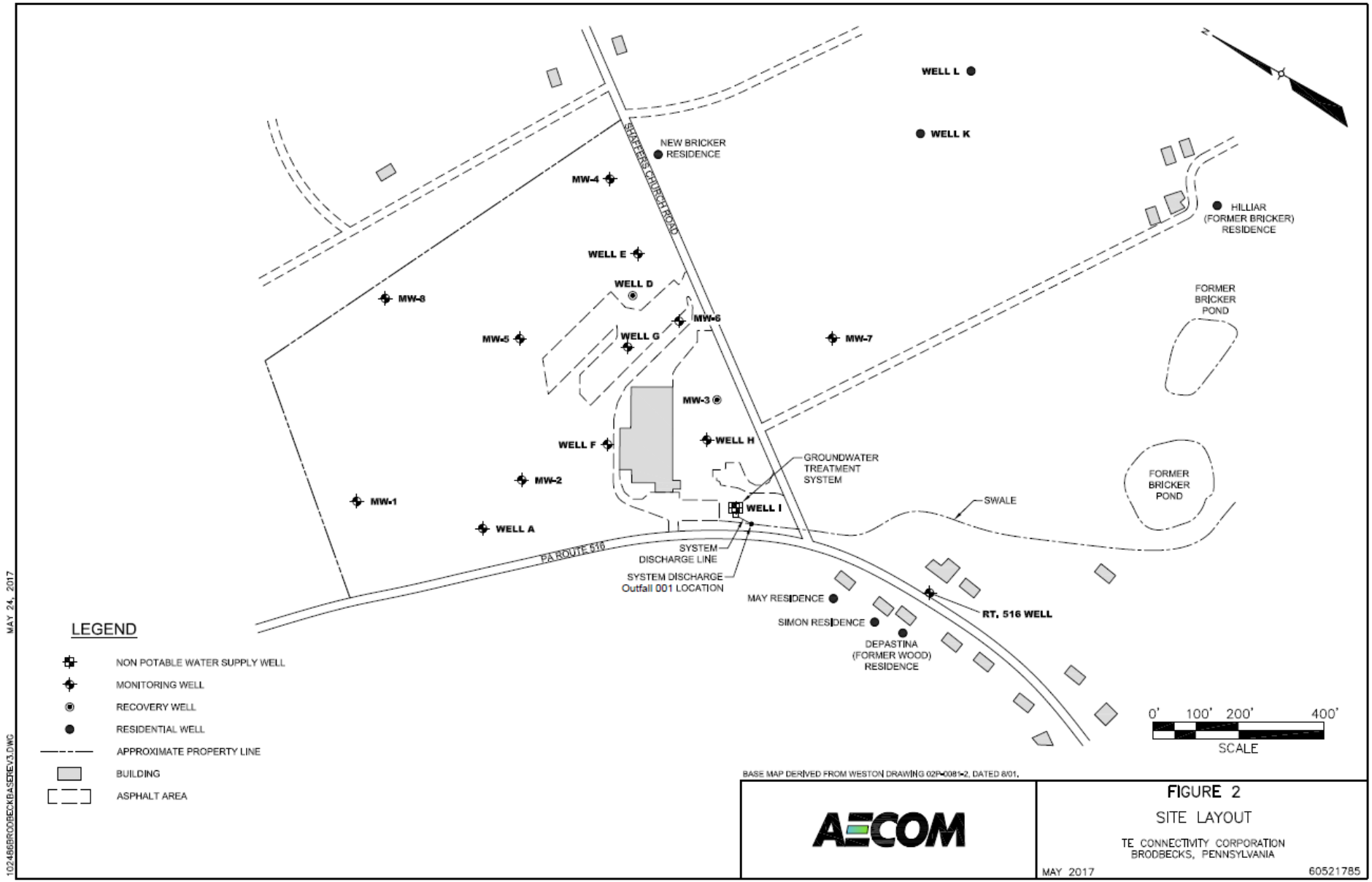

Figure 2. Site Layout

PA0083305. TE Connectivity Brodbecks GWTS

Region ID: PA
Workspace ID: PA20191218152857213000
Clicked Point (Latitude, Longitude): 39.77959, -76.80363
Time: 2019-12-18 10:29:13 -0500

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.35	square miles

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

Low-Flow Statistics Flow Report[Low Flow Region 1]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.111	ft^3/s
30 Day 2 Year Low Flow	0.136	ft^3/s
7 Day 10 Year Low Flow	0.0497	ft^3/s
30 Day 10 Year Low Flow	0.0643	ft^3/s
90 Day 10 Year Low Flow	0.0936	ft^3/s

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. (http://pubs.usgs.gov/sir/2006/5130/)

Figure 3. Basin Delineation (from the location where the dry stream enters Krebs Valley Run at RMI 3.900)

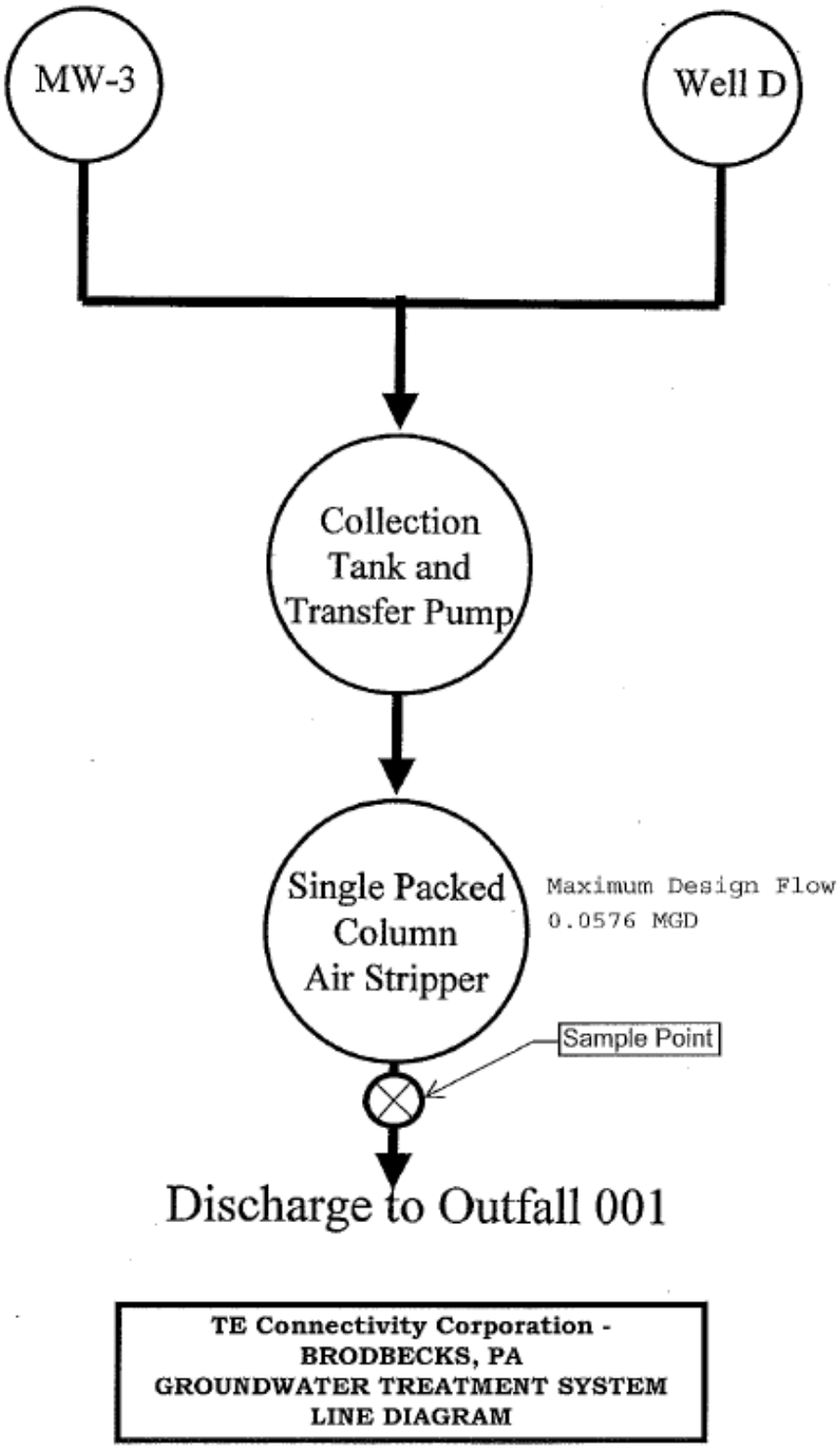

Figure 4. Line Diagram of the Groundwater Treatment System

Attachment A
Historical Influent and Effluent Data

Table B-1
Summary of VOCs Detected in the Remedial Tower Influent Samples
TE Connectivity - Brodbecks, PA

Date	Chloroform	1,2-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Freon 113	1,1,2-TCA	Total VOCs	VOC Running Average
02/10/88	3	6	<2	125	4	4	6	<1	148	-
05/10/88	3	5	<2	145	3	3	3	<1	162	-
08/11/88	3	7	<2	114	3	3	1	<1	131	-
11/10/88	3	2	<2	82	2	3	2	<1	94	133.8
02/09/89	2	2	<2	55	3	3	1	<1	66	113.3
05/11/89	3	2	<2	61	3	3	1	<1	73	91.0
08/10/89	2	<1	<2	120	2	2	1	<1	127	90.0
11/09/89 1	<1	<1	<2	89	2	2	<1	<1	95	90.3
02/06/90	<1	<1	<1	40	3.4	<1	<1	<1	43.4	84.6
03/05/90	1.1	<1	<1	50	<1	1.2	<1	<1	52.3	79.4
04/04/90	<1	<1	<1	90	<1	1.2	<1	<1	91.2	70.5
05/02/90	<1	<1	<1	64	<1	1.2	<1	<1	65.2	63.0
08/01/90	<1	<1	<1	40	<1	<1	<1	<1	40	62.2
11/07/90	<1	<1	<1	32	<1	<1	<1	<1	32	57.1
02/05/91	<1	<1	<1	65	<1	2.3	<1	<1	67.3	51.1
04/30/91	<1	<1	<1	45	<1	<1	<1	<1	45	46.1
08/28/91	<1	<1	<2	48	<1	1	<1	<1	49	48.3
11/08/91	<1	<1	<2	21	1	1	<1	<1	23	46.1
02/04/92	<1	<1	<2	52	1	1	<1	<1	54	42.8
05/04/92	<1	<1	<2	57	<1	1	<1	<1	58	46.0
08/05/92	<1	<1	<2	46	<1	<1	<1	<1	46	45.3
11/09/92	<1	<1	<2	17	<1	<1	<1	<1	17	43.8
02/09/93	<1	<1	<2	47	<1	1	<1	<1	48	42.3
05/06/93	<1	<1	<2	79	<1	<1	<1	<1	79	47.5
08/04/93	<1	<1	<2	79	<1	<1	<1	<1	79	55.8
10/05/93	<1	<1	<4	76	<1	<1	NA	<1	76	70.5
01/10/94	<1	<1	<4	83	<1	1.1	NA	<1	84.1	79.5
04/26/94	<1	<1	<4	62	<1	<1	<1	<1	62	75.3
07/14/94	<1	<1	<4	81	<1	<1	<1	<1	81	75.8
10/06/94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
02/01/95	<1	<1	<1	64	<1	1.3	<1	<1	65.3	73.1
04/25/95	<2	<2	<4	32	<2	<2	<4	<2	32	80.1
08/22/95	<1	<1	1.5	33	<1	<1	<1	<1	34.5	53.2
10/25/95 2	<1	<1	2.2	31	<1	<1	<1	<1	33.2	41.3
02/14/96	<2	<2	<8	56	<2	<2	<4	<2	56	38.9
04/16/96	<1	<1	<4	92	<1	<1	<2	<1	92	53.9
07/24/96	<1	<1	<4	17	<1	<1	<1	<1	17	49.6
10/29/96	<1	<1	<4	35	<1	<1	<2	<1	35	50.0
02/06/97	<2	<2	<8	54	<2	<2	<4	<2	54	49.5
04/23/97	<2	<2	<8	59	<2	<2	<4	<2	59	41.3
08/05/97	<1	<1	<4	21	<1	<1	<2	<1	21	42.3
10/31/97	<1	<1	<4	23	<1	<1	<2	<1	23	39.3
02/17/98	<1	<1	<4	9.7	<1	<1	<2	<1	9.7	28.2
05/22/98	<1	<1	<4	28	<1	<1	<2	<1	28	20.4
08/05/98	<1	<1	<4	30	<1	<1	<2	<1	30	22.7
10/22/98	<1	<1	<4	19	<1	<1	<2	<1	19	21.7

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Table B-1
Summary of VOCs Detected in the Remedial Tower Influent Samples
TE Connectivity - Brodbecks, PA

Date	Chloroform	1,2-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Freon 113	1,1,2-TCA	Total VOCs	VOC Running Average
03/08/99	<1	<1	<2	<1	<1	<1	NA	<1	ND	19.3
05/19/99	<1	<1	<2	17.5	<1	<1	NA	<1	17.5	16.6
08/26/99	<1	<1	<2	24.8	<1	<1	NA	<1	24.8	15.3
11/11/99	<1	<1	<2	16	<1	<1	NA	<1	16	14.6
01/20/00	<1	<1	<2	22	<1	<1	NA	<1	22	20.1
05/03/00	<1	<1	<2	13	<1	<1	NA	<1	13	19.0
09/07/00	<1	<1	<2	30	<1	<1	NA	<1	30	20.3
11/01/00	<1	<1	<2	27	<1	<1	NA	<1	27	23.0
03/09/01	<1	<1	<2	19	<1	<1	NA	<1	19	22.3
05/02/01	<1	<1	<2	25	<1	<1	NA	<1	25	25.3
08/27/01	<1	<1	<2	21	<1	<1	NA	<1	21	23.0
11/27/01	<1	<1	<2	18	<1	<1	NA	<1	18	20.8
01/31/02	<1	<1	<2	20	<1	<1	NA	<1	20	21.0
06/24/02	<1	<1	<2	36	<1	<1	NA	<1	36	23.8
09/10/02	<1	<1	<2	2.5	<1	<1	NA	<1	2.5	19.1
11/13/02	<1	<1	<2	17	<1	<1	NA	<1	17	18.9
03/17/03	<1	<1	<2	57	<1	<1	NA	<1	57	28.1
05/22/03	<1	<1	<2	34	<1	<1	NA	<1	34	27.6
08/21/03	<1	<1	<2	75	<1	<1	NA	<1	75	45.8
11/13/03	<1	<1	<2	35	<1	<1	NA	<1	35	50.3
02/23/04	<1	<1	<2	42	<1	<1	NA	<1	42	46.5
05/27/04	<1	<1	<2	85	<1	<1	NA	<1	85	59.3
08/03/04	<1	<1	<2	46	<1	<1	NA	<1	46	52.0
11/02/04	<1	<1	<2	27	<1	<1	NA	<1	27	50.0
02/09/05 3	<1	<1	<2	60	<1	<1	NA	<1	61.1	54.8
05/03/05	<1	<1	<2	21	<1	<1	NA	<1	21	38.8
08/10/05	<1	<1	<2	18	<1	<1	NA	<1	18	31.8
11/01/05	<1	<1	<2	9.5	<1	<1	NA	<1	9.5	27.4
02/21/06	<1	<1	<2	22	<1	<1	NA	<1	22	17.6
05/16/06	<1	<1	<2	21	<1	<1	NA	<1	21	17.6
08/22/06	<1	<1	<2	15	<1	<1	NA	<1	15	16.9
11/08/06	<1	<1	<2	9.1	<1	<1	NA	<1	9.1	16.775
02/12/07	<1	<1	<2	23	<1	<1	NA	<1	23	17.0
05/17/07	<1	<1	<2	21	<1	<1	NA	<1	21	17.025
08/13/07	<1	<1	<2	11	<1	<1	NA	<1	11	16.0
11/20/07	<1	<1	<2	5.4	<1	<1	NA	<1	5.4	15.1
02/18/08	<1	<1	<2	12	<1	<1	NA	<1	12	12.4
05/27/08	<1	<1	<2	27	<1	<1	NA	<1	27	13.85
08/26/08	<1	<1	<2	16	<1	<1	NA	<1	16	15.1
11/25/08	<1	<1	<2	13	<1	<1	NA	<1	13	17
02/11/09	<1	<1	<2	30	<1	<1	NA	<1	30	21.5
05/19/09	<1	<1	<2	23	<1	<1	NA	<1	23	20.5
08/10/09	<1	<1	<2	38	<1	<1	NA	<1	38	26.0
12/07/09	<1	<1	<2	27	<1	<1	NA	<1	27	29.5

2

Table B-1
Summary of VOCs Detected in the Remedial Tower Influent Samples
TE Connectivity - Brodbecks, PA

Date	Chloroform	1,2-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Freon 113	1,1,2-TCA	Total VOCs	VOC Running Average
02/23/10	<1	<1	<2	33	<1	<1	NA	<1	33	30.3
05/28/10	<1	<1	<2	<1	<1	<1	NA	<1	0	24.5
08/25/10	<5	<5	<5	30	<5	<5	<5	<5	30	22.5
11/23/10	<5	<5	<5	19	<5	<5	<5	<5	19	20.5
02/15/11	<5	<5	<5	8	<5	<5	NA	<5	8	14.3
05/17/11	<5	<5	<5	19	<5	<5	NA	<5	19	19
08/09/11	<5	<5	<5	23	<5	<5	NA	<5	23	17.3
11/29/11	<5	<5	<5	43	<5	<5	NA	<5	43	23.3
02/20/12	<5	<5	<5	27	<5	<5	NA	<5	27	28.0
05/31/12	<5	<5	<5	22	<5	<5	NA	<5	22	28.8
08/27/12	<5	<5	<5	16	<5	<5	NA	<5	16	27.0
11/13/12	<5	<5	<5	20	<5	<5	NA	<5	20	21.3
02/25/13	<5	<5	<5	25	<5	<5	NA	<5	25	20.8
06/04/13	<5	<5	<5	17	<5	<5	NA	<5	17	19.5
08/26/13	<5	<5	<5	14	<5	<5	NA	<5	14	19.0
11/19/13	<5	<5	<5	16	<5	<5	NA	<5	16	18.4
02/14/14	<5	<5	<5	15	<5	<5	NA	<5	15	17.4
05/14/14	<5	<5	<5	26	<5	<5	NA	<5	26	17.8
08/06/14	<5	<5	<5	22	<5	<5	NA	<5	22	19.8
11/26/14	<5	<5	<5	11	<5	<5	NA	<5	11	18.5
02/09/15	<5	<5	<5	7	<5	<5	NA	<5	7	16.5
05/06/15	<5	<5	<5	14	<5	<5	NA	<5	14	13.5
08/19/15	<5	<5	<5	10	<5	<5	NA	<5	10	10.5
11/23/15	<5	<5	<5	10	<5	<5	NA	<5	10	10.3
02/15/16	<5	<5	<5	10	<5	<5	NA	<5	10	11.0
05/10/16	<1	<1	<1	14	<1	<1	NA	<1	14	11.0
08/09/16	<1	<1	<1	9	<1	<1	NA	<1	9	10.8
11/29/16	<1	<1	<1	6	<1	<1	NA	<1	6	9.8
02/06/17	<1	<1	<1	3	<1	<1	NA	<1	3	8.0
04/03/17	<1	<1	<1	5	<1	<1	NA	<1	5	5.8
08/23/17	<1	<1	<1	7	<1	<1	NA	<1	7	5.3
11/06/17	<1	<1	<1	6	<1	<1	NA	<1	6	5.3
02/07/18	<1	<1	<1	5	<1	<1	NA	<1	5	5.8
05/23/18	<1	<1	<1	8	<1	<1	NA	<1	4	5.5
08/30/18	<1	<1	<1	8	<1	<1	NA	<1	8	5.8
11/21/18 4	<1	<1	<1	18	<1	<1	NA	<1	18	8.8
02/14/19	<1	<1	<1	24	<1	<1	NA	<1	5	8.8
05/21/19	<1	<1	<1	19.2	<1	<1	NA	<1	4	8.8
08/13/19	<1	<1	<1	4.48	<1	<1	NA	<1	4.48	7.2
11/12/19	<1	<1	<1	7.90	<1	<1	NA	<1	7.90	5.3

All units µg/L.
NA - Not analyzed.
NS - Not sampled.
1 Chlorodibromomethane (2 ppb).
2 Methylene Chloride attributed to laboratory artifact.
3 cis-1,2-DCE (1.1 ppb).
4 High water levels due to significant rain events during summer/fall 2018.

Table B-2
Summary of VOCs Detected in Remedial Tower Effluent Samples
TE Connectivity - Brodbecks, PA

Date	Chloroform	1,2-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Freon 113	1,1,2-TCA	Total VOCs
02/10/88	<1	2	<2	2	<1	<1	<1	<1	4
05/10/88	<1	<1	<2	2	<1	<1	<1	<1	2
08/11/88	<1	6	<2	2	<1	<1	<1	<1	8
11/10/88	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/09/89	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/11/89	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/26/89	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/09/89	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/21/89	<1	<1	<2	<1	<1	<1	<1	<1	ND
07/24/89	<1	<1	<2	<1	<1	<1	<1	<1	ND
07/28/89	<1	<1	<2	<1	<1	<1	<1	<1	ND
08/10/89	<1	<1	<2	1	<1	<1	<1	<1	1
08/21/89	<1	<1	<2	<1	<1	<1	<1	<1	ND
11/09/89	<1	<1	<2	<1	<1	<1	<1	<1	ND
11/30/89	<1	<1	<2	<1	<1	<1	<1	<1	ND
01/12/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
01/26/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/06/90	<1	<1	<1	<1	<1	<1	<1	<1	ND
02/09/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/19/90	<1	<1	<1	<1	<1	<1	<1	<1	ND
02/21/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
03/05/90	<1	<1	<1	<1	<1	<1	<1	<1	ND
03/19/90	<1	<1	<1	<1	<1	<1	<1	<1	ND
04/04/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
04/16/90	<1	<1	<1	<1	<1	<1	<1	<1	ND
04/18/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/02/90	<1	<1	<1	<1	<1	<1	<1	<1	ND
05/15/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/01/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/12/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/29/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
07/12/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
07/23/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
08/01/90	<1	<1	<1	<1	<1	<1	<1	<1	ND
08/07/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
08/27/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
09/13/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
09/25/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
10/11/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
10/23/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
11/07/90	<1	<1	<1	<1	<1	<1	<1	<1	ND
11/19/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
12/05/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
12/20/90	<1	<1	<2	<1	<1	<1	<1	<1	ND
01/07/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
01/18/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/05/91	<1	<1	<1	4.1	<1	<1	<1	<1	4.1
02/12/91	<1	<1	<2	<1	<1	<1	<1	<1	ND

All units ug/L
NA - Not analyzed
ND - Not detected

1

Table B-2 (continued)
Summary of VOCs Detected in Remedial Tower Effluent Samples

Date	Chloroform	1,2-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Freon 113	1,1,2-TCA	Total VOCs
02/28/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
03/18/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
03/28/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
04/09/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
04/25/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
04/30/91	<1	<1	<1	<1	<1	<1	<1	<1	ND
05/10/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/22/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/07/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/28/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
07/10/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
07/22/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
08/07/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
08/19/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
08/28/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
09/06/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
09/20/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
10/02/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
10/18/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
10/31/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
11/08/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
11/13/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
12/27/91	<1	<1	<2	<1	<1	<1	<1	<1	ND
01/06/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
01/22/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/03/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/04/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/17/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
03/04/92	<1	<1	<2	<1	2	<1	<1	<1	2
03/19/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
04/03/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
04/14/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/01/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/04/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/13/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/28/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/08/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/26/92	<1	<1	<2	1	<1	<1	<1	<1	1
07/10/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
07/24/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
08/05/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/20/12	<1	<1	<2	<1	27	<1	<1	<1	ND
05/31/12	<1	<1	<2	<1	22	<1	<1	<1	ND
08/06/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
08/31/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
09/15/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
09/30/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
10/12/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
10/26/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
11/09/92	<1	<1	<2	<1	<1	<1	<1	<1	ND

All units ug/L
NA - Not analyzed
ND - Not detected

2

Table B-2 (continued)
Summary of VOCs Detected in Remedial Tower Effluent Samples

Date	Chloroform	1,2-DCA	Chloride	PCE	TCA	TCE	Freon 113	TCA	VOCs
11/10/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
11/30/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
12/22/92	<1	<1	<2	<1	<1	<1	<1	<1	ND
01/04/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
01/20/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/05/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/09/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
02/26/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
03/03/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
03/18/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
03/30/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
04/15/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
04/26/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/06/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/14/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
05/24/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/11/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
06/25/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
07/09/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
07/21/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
08/02/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
08/04/93	<1	<1	<2	<1	<1	<1	<1	<1	ND
09/08/93	NA	NA	NA	<1	<1	<1	NA	<1	ND
09/20/93	NA	NA	NA	<1	<1	<1	NA	<1	ND
10/05/93	<1	<1	<4	<1	<1	<1	<1	<1	ND
10/19/93	NA	NA	NA	<1	<1	<1	NA	<1	ND
11/08/93	NA	NA	NA	<1	<1	<1	NA	<1	ND
11/17/93	NA	NA	NA	<1	<1	<1	NA	<1	ND
12/08/93	NA	NA	NA	<1	<1	<1	NA	<1	ND
12/20/93	NA	NA	NA	<1	<1	<1	NA	<1	ND

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Table B-2
Summary of VOCs Detected in Remedial Tower Effluent Samples

Date	Chloroform	1,2-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Freon 113	1,1,2-TCA	Total VOCs
01/04/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
01/10/94	<1	<1	<4	<1	<1	<1	<1	<1	ND
01/19/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
02/04/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
02/17/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
03/04/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
03/24/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
04/08/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
04/26/94	<1	<1	<4	<1	<1	<1	<1	<1	ND
05/10/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
05/18/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
06/03/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
06/15/94	<1	<1	<4	<1	<1	<1	<1	<1	ND
07/14/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
07/21/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
08/08/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
08/25/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
09/14/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
09/28/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
10/05/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
10/20/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
11/03/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
11/23/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
12/02/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
12/20/94	NA	NA	NA	<1	<1	<1	NA	<1	ND
01/05/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
01/16/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
02/01/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
02/14/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
03/02/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
03/16/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
04/03/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
04/25/95	<1	<1	<4	<1	<1	<1	<2	<1	ND
05/04/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
05/16/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
06/14/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
06/23/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
07/06/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
07/21/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
08/10/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
08/22/95	<1	<1	<1	<1	<1	<1	<1	<1	ND
09/12/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
09/22/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
10/11/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
10/25/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
11/08/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
11/16/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
12/06/95	NA	NA	NA	<1	<1	<1	NA	<1	ND
12/12/95	NA	NA	NA	<1	<1	<1	NA	<1	ND

4

Table B-2 (continued)
Summary of VOCs Detected in Remedial Tower Effluent Samples

Date	Chloroform	1,2-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Freon 113	1,1,2-TCA	Total VOCs
01/11/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
01/23/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
02/06/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
02/14/96	<1	<1	<1	<1	<1	<1	NA	<1	ND
03/04/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
03/19/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
04/04/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
04/17/96	<1	<1	<4	<1	<1	<1	<2	<1	ND
05/02/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
05/16/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
06/11/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
06/25/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
07/11/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
07/24/96	<1	<1	<4	<1	<1	<1	NA	<1	ND
08/06/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
09/04/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
10/29/96	NA	NA	NA	<1	<1	<1	NA	<1	ND
01/03/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
01/21/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
02/06/97	<1	<1	<4	<1	<1	<1	NA	<1	ND
02/18/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
03/03/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
03/21/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
04/10/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
04/23/97	<1	<1	<4	<1	<1	<1	<2	<1	ND
05/06/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
05/29/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
06/05/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
06/18/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
07/08/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
07/30/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
08/05/97	<1	<1	<4	<1	<1	<1	<2	<1	ND
08/18/97	<1	<1	<4	<1	<1	<1	<2	<1	ND
09/03/97	<1	NA	NA	NA	<1	<1	NA	<1	ND
09/23/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
10/16/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
10/31/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
11/07/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
11/13/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
12/12/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
12/19/97	NA	NA	NA	<1	<1	<1	NA	<1	ND
01/15/98	NA	NA	NA	<1	<1	<1	NA	<1	ND
01/21/98	NA	NA	NA	<1	<1	<1	NA	<1	ND
02/04/98	NA	NA	NA	<1	<1	<1	NA	<1	ND
02/17/98	NA	NA	NA	<1	<1	<1	NA	<1	ND
03/03/98	NA	NA	NA	<1	<1	<1	NA	<1	ND
03/12/98	NA	NA	NA	<1	<1	<1	NA	<1	ND
04/10/98	NA	NA	NA	<1	<1	<1	NA	<1	ND
04/21/98	NA	NA	NA	<1	<1	<1	NA	<1	ND
05/12/98	NA	NA	NA	<1	<1	<1	NA	<1	ND

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Table B-2 (continued)
Summary of VOCs Detected in Remedial Tower Effluent Samples

Date	Chloroform	1,2-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Freon 113	1,1,2-TCA	Total VOCs
05/22/98	NA	NA	NA	<1	<1	<1	NA	<1	ND
06/04/98	NA	NA	NA	<1	<1	<1	NA	<1	ND
07/07/98	NA	NA	NA	<1	NA	<1	NA	<1	ND
08/05/98	NA	NA	NA	<1	NA	<1	NA	<1	ND
09/01/98	NA	NA	NA	<1	NA	<1	NA	<1	ND
10/06/98	NA	NA	NA	<1	NA	<1	NA	<1	ND
10/22/98	<1	<1	<4	<1	<1	<1	<2	<1	ND
11/03/98	NA	NA	NA	<1	NA	<1	NA	<1	ND
12/01/98	NA	NA	NA	<1	NA	<1	NA	<1	ND
01/05/99	NA	NA	NA	<1	NA	<1	NA	<1	ND
02/04/99	NA	NA	NA	<1	NA	<1	NA	<1	ND
03/08/99	<1	<1	<2	<1	<1	<1	NA	<1	ND
03/09/99	NA	NA	NA	<1	NA	<1	NA	<1	ND
04/08/99	NA	NA	NA	<1	NA	<1	NA	<1	ND
05/05/99	<1	<1	<2	<1	<1	<1	NA	<1	ND
05/19/99	<1	<1	<2	<1	<1	<1	NA	<1	ND
06/02/99	NA	NA	NA	<1	NA	<1	NA	<1	ND
07/07/99	NA	NA	NA	<1	NA	<1	NA	<1	ND
08/26/99	NA	<1	<2	<1	<1	<1	NA	<1	ND
11/11/99	<1	<1	<2	<1	<1	<1	NA	<1	ND
01/20/00	<1	<1	<2	<1	<1	<1	NA	<1	ND
05/03/00	<1	<1	<2	<1	<1	<1	NA	<1	ND
09/07/00	<1	<1	<2	<1	<1	<1	NA	<1	ND
11/01/00	<1	<1	<2	<1	<1	<1	NA	<1	ND
03/09/01	<1	<1	<2	<1	<1	<1	NA	<1	ND
05/02/01	<1	<1	<2	<1	<1	<1	NA	<1	ND
08/27/01	<1	<1	<2	<1	<1	<1	NA	<1	ND
11/20/01	<1	<1	<2	<1	<1	<1	NA	<1	ND
01/31/02	NA	NA	NA	<1	NA	<1	NA	<1	ND
06/24/02	<1	<1	<2	<1	<1	<1	NA	<1	ND
09/10/02	NA	NA	NA	<1	NA	<1	NA	<1	ND
11/13/02	NA	NA	NA	<1	NA	<1	NA	<1	ND
03/11/03	<1	<1	<1	<1	<1	<1	NA	<1	ND
05/22/03	NA	NA	NA	<1	NA	<1	NA	<1	ND
08/21/03	NA	NA	NA	<1	NA	<1	NA	<1	ND
11/13/03	<1	<1	<1	<1	<1	<1	NA	<1	ND
02/23/04	<1	<1	<2	<1	<1	<1	NA	<1	ND
05/27/04	NA	NA	NA	<1	NA	<1	NA	<1	ND
08/03/04	NA	NA	NA	<1	NA	<1	NA	<1	ND
11/02/04	NA	NA	NA	<1	NA	<1	NA	<1	ND
02/09/05	NA	NA	NA	<1	NA	<1	NA	<1	ND
05/03/05	NA	NA	NA	<1	NA	<1	NA	<1	ND
08/10/05	NA	NA	NA	<1	NA	<1	NA	<1	ND
11/01/05	NA	NA	NA	<1	NA	<1	NA	<1	ND
02/21/06	NA	NA	NA	<1	NA	<1	NA	<1	ND
05/16/06	NA	NA	NA	<1	NA	<1	NA	<1	ND
08/22/06	NA	NA	NA	<1	NA	<1	NA	<1	ND
11/08/06	NA	NA	NA	<1	NA	<1	NA	<1	ND
02/12/07	NA	NA	NA	<1	NA	<1	NA	<1	ND
05/17/07	<1	<1	<2	<1	<1	<1	NA	<1	ND
08/13/07	<1	<1	<2	<1	<1	<1	NA	<1	ND
11/20/07	NA	NA	NA	<1	NA	<1	NA	<1	ND

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Table B-2 (continued)
Summary of VOCs Detected in Remedial Tower Effluent Samples

Date	Chloroform	1,2-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Freon 113	1,1,2-TCA	Total VOCs
02/18/08	NA	NA	NA	<1	NA	<1	NA	<1	ND
05/27/08	NA	NA	NA	<1	NA	<1	NA	<1	ND
08/26/08	NA	NA	NA	<1	NA	<1	NA	<1	ND
11/25/08	NA	NA	NA	<1	NA	<1	NA	<1	ND
02/11/09	NA	NA	NA	<1	NA	<1	NA	<1	ND
05/19/09	NA	NA	NA	<1	NA	<1	NA	<1	ND
08/10/09	NA	NA	NA	<1	NA	<1	NA	<1	ND
12/07/09	NA	NA	NA	<1	NA	<1	NA	<1	ND
02/23/10	NA	NA	NA	<1	NA	<1	NA	<1	ND
08/25/10	NA	NA	NA	<5	NA	<5	NA	<5	ND
11/22/10	NA	NA	NA	<5	NA	<5	NA	<5	ND
02/15/11	NA	NA	NA	<5	NA	<5	NA	<5	ND
05/17/11	NA	NA	NA	<5	NA	<5	NA	<5	ND
08/09/11	NA	NA	NA	<5	NA	<5	NA	<5	ND
11/29/11	NA	NA	NA	<5	NA	<5	NA	<5	ND
02/20/12	NA	NA	NA	<5	NA	<5	NA	<5	ND
05/31/12	NA	NA	NA	<5	NA	<5	NA	<5	ND
08/27/12	NA	NA	NA	<5	NA	<5	NA	<5	ND
11/13/12	NA	NA	NA	<5	NA	<5	NA	<5	ND
02/25/13	NA	NA	NA	<5	NA	<5	NA	<5	ND
06/04/13	NA	NA	NA	<5	NA	<5	NA	NA	ND
08/26/13	NA	NA	NA	<5	NA	NA	NA	NA	ND
11/19/13	NA	NA	NA	<5	NA	NA	NA	NA	ND
02/14/14	NA	NA	NA	<5	NA	NA	NA	NA	ND
05/14/14	NA	NA	NA	<5	NA	NA	NA	NA	ND
08/06/14	NA	NA	NA	<5	NA	NA	NA	NA	ND
11/26/14	NA	NA	NA	<5	NA	NA	NA	NA	ND
02/09/15	NA	NA	NA	<5	NA	NA	NA	NA	ND
05/06/15	NA	NA	NA	<5	NA	NA	NA	NA	ND
08/19/15	NA	NA	NA	<5	NA	NA	NA	NA	ND
11/23/15	NA	NA	NA	<5	NA	NA	NA	NA	ND
02/15/16	NA	NA	NA	<5	NA	NA	NA	NA	ND
05/10/16	NA	NA	NA	<1	NA	NA	NA	NA	ND
08/09/16	NA	NA	NA	<1	NA	NA	NA	NA	ND
11/29/16	NA	NA	NA	<1	NA	NA	NA	NA	ND
02/06/17	<1	<1	<1	<1	<1	<1	NA	<1	ND
04/03/17	<1	<1	<1	<1	<1	<1	NA	<1	ND
08/23/17	NA	NA	NA	<1	NA	NA	NA	<1	ND
11/06/17	NA	NA	NA	<1	NA	NA	NA	<1	ND
02/07/18	NA	NA	NA	<1	NA	NA	NA	<1	ND
05/23/18	NA	NA	NA	<1	NA	NA	NA	<1	ND
08/30/18	NA	NA	NA	<1	NA	NA	NA	<1	ND
11/21/18	NA	NA	NA	<1	NA	NA	NA	<1	ND
02/14/19	NA	NA	NA	<1	NA	NA	NA	<1	ND
05/21/19	NA	NA	NA	<1	NA	NA	NA	<1	ND
08/13/19	NA	NA	NA	<1	NA	NA	NA	<1	ND
11/12/19	NA	NA	NA	<1.00	NA	NA	NA	<1.00	ND

All units in µg/L.
NA - Not analyzed.
ND - Not detected.
Effluent data prior to 1996 summarized in previous reports.