UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2852

SUBJECT: Long-term Stewardship Desktop Assessment
TE Connectivity (formerly AMP Corporation)
EPA ID: PAD041421223
10709 S. Susquehanna Trail
Glen Rock, PA 17327

DATE: September 23, 2022

TO: Alizabeth Olhasso, Branch Chief
RCRA CA Branch 2

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RCRA CA Branch 2

Introduction:
Long-term stewardship (LTS) refers to the activities necessary to ensure that engineering controls (ECs) are maintained and that institutional controls (ICs) continue to be enforced. The purpose of the EPA Region 3 LTS program is to periodically assess the efficacy of the implemented remedies (i.e, ECs and ICs) and to update the community on the status of the RCRA Corrective Action facilities. The assessment is conducted in twofold, which consists of a record review and a field inspection, to ensure that the remedies are implemented and maintained in accordance with the final decision.

Remedy Assessment Summary:
Based on a site-wide groundwater study that demonstrated that the levels of Constituents of Concern (COCs) in groundwater have stabilized and do not impact groundwater quality downgradient of the Site and the potential human exposure risks to the contaminated groundwater and its impact to the environment are minimal, TE Connectivity (TEC) submitted a petition to EPA to revise the cleanup goals for 1,1,2-TCA from 5 µg/L to 27.5 µg/L and for vinyl chloride (VC) from 0.2 µg/L to the MCL of 2.0 µg/L. EPA concurred with the conclusion of the groundwater study, and on October 13, 2015, EPA approved TEC's petition to revise the cleanup goals for 1,1,2-TCA and VC. On January 27, 2017, EPA issued an Explanation of Significant Differences (ESD) that modified the 1991 RCRA Record of Decision (RCRA ROD) Corrective Measures to reflect the revised groundwater cleanup goals and required the implementation of institutional controls that restrict groundwater use and limit land use to non-residential. TEC demonstrated that the COCs in groundwater have met the revised groundwater cleanup goal. On January 30, 2017, TEC executed an environmental that imposes the required institutional controls. Under the conditions set forth in the Administrative Order of Consent (AOC) and the ESD, EPA determined that TEC has demonstrated, to the satisfaction of EPA, that the terms of the AOC, including any additional tasks determined by EPA to be required pursuant to the AOC, have been satisfactorily completed. Therefore, EPA terminated the AOC on July 20, 2017.

Facility Background:
The Facility occupies approximately 33 acres in Glen Rock, York County, Pennsylvania 17327. AMP, Inc. and its successor, TEC owned and operated the Facility from the late 1950s to 2001. The Facility consisted of two buildings, the Material Development Laboratory Building and the Plastics Building. During its period of operation, TEC conducted research on contact adhesives and lubricants and manufactured injection-molded plastic and polyester parts used in connector systems and applications. As a result of the manufacturing operations at the Facility, groundwater and soil at the Facility became contaminated with volatile organic compounds (VOCs).

On January 22, 1991, EPA issued a RCRA ROD for the Facility in which EPA selected, among other things, the continued pumping and treatment of groundwater using air stripper towers until the Maximum Contaminant Levels (MCLs) are attained and the installation of a bedrock flushing infiltration trench to expedite the process of remediating contaminated subsoil and bedrock at the Facility. Contaminated surface soils were excavated and disposed offsite. Impacted subsoils and bedrock areas were remediated. After twenty-seven (27) years of groundwater pump and treat, concentrations of COCs achieved the applicable MCLs at all the point of compliance (POC) wells except for 1,1,2-trichloroethane (1,1,2-TCA) in well R-5B, which is located closest to the former contamination source area. The 1,1,2-TCA level in well R-5B has decreased 99% from the original concentration of 2,636.0 µg/L in 1984 to the most recent concentration of 24 µg/L.

The RCRA ROD acknowledges that due to the elevated concentrations of the COCs and the kinetics of chemical and physical desorption of contaminants in groundwater, it may be technically impossible to attain the cleanup goals of the Maximum Contaminant Levels (MCLs) throughout the groundwater plume. Therefore, the RCRA ROD states that if the concentrations of 1,1,2-trichloroethane (1,1,1-TCA), trichloroethylene (TCE), and 1,1,2-TCA in groundwater remain stable after a minimum of five (5) years of groundwater remediation, TEC may petition EPA to revise the cleanup goals.

From May 2011 to December 2013, TEC conducted a site-wide groundwater study to evaluate the characteristics of the groundwater plume and the potential of plume migration under static conditions. The groundwater flow direction is to the south-southeast of the Facility. The closest surface water body is a man-made pond known as Larkin Pond, located approximately a quarter mile south-southeast of the Site. Eleven consecutive quarters of groundwater data were collected during the span of the study. The study concluded that the groundwater plume is stable and has remained within the Facility property boundaries and does not impact Larkin Pond. Under static conditions, the groundwater data indicate that the levels of the COCs have either steadied or showed a decreasing trend. Historically, the groundwater data at the POCs have remained stable for more than five years. Groundwater trend analyses from the study show that the groundwater contamination levels are expected to continue to decrease over time. To further evaluate the potential of groundwater plume migration under static conditions, a fate and transport groundwater modeling was performed at the Facility. The model predicted that the groundwater contaminant plume is expected to remain within the Facility boundary for the foreseeable future and does not impact groundwater quality downgradient of the Facility.

The potential human exposure risks to the contaminated groundwater and its impact to the environment are minimal. There are no direct human exposures to the contaminated groundwater. The Facility is connected to public water. A well survey within 0.5 miles downgradient of the Facility indicated that there are no current groundwater receptors. Properties that are located downgradient and within one-

half mile of the Facility are zoned industrial and are connected to public water. The local ordinance requires all current and future residences in Glen Rock Borough be connected to public water. Therefore, the potential of direct human exposure to the groundwater contamination at the Facility are mitigated.

The levels of COCs at the Site do not pose a potential indoor vapor intrusion risk onsite or offsite. Levels of 1,1,2-TCA in the groundwater that are above the MCL are contained within the property boundaries and are below the EPA Vapor Intrusion Screening Level (VISL) for non-residential properties. These levels in groundwater do not pose a significant risk for potential indoor vapor intrusion at the Site.

Based on a site-wide groundwater study and the risk assessment, TEC submitted a petition to EPA to revise the cleanup goals for 1,1,2-TCA from 5 µg/L to 27.5 µg/ and for VC from 0.2 µg/L to the MCL of 2.0 µg/L. EPA concurred with the conclusion of the groundwater study, and on October 13, 2015, EPA approved TEC's petition to revise the cleanup goals for 1,1,2-TCA and VC. Subsequently, EPA issued an ESD that modified the 1991 RCRA ROD Corrective Measures to reflect the revised groundwater cleanup goals and required the implementation of institutional controls that restrict groundwater use and limit land use to non-residential. EPA determined that TEC has demonstrated, to the satisfaction of EPA, that the terms of the AOC and the ESD have been satisfactorily completed. EPA terminated the AOC on July 20, 2017.

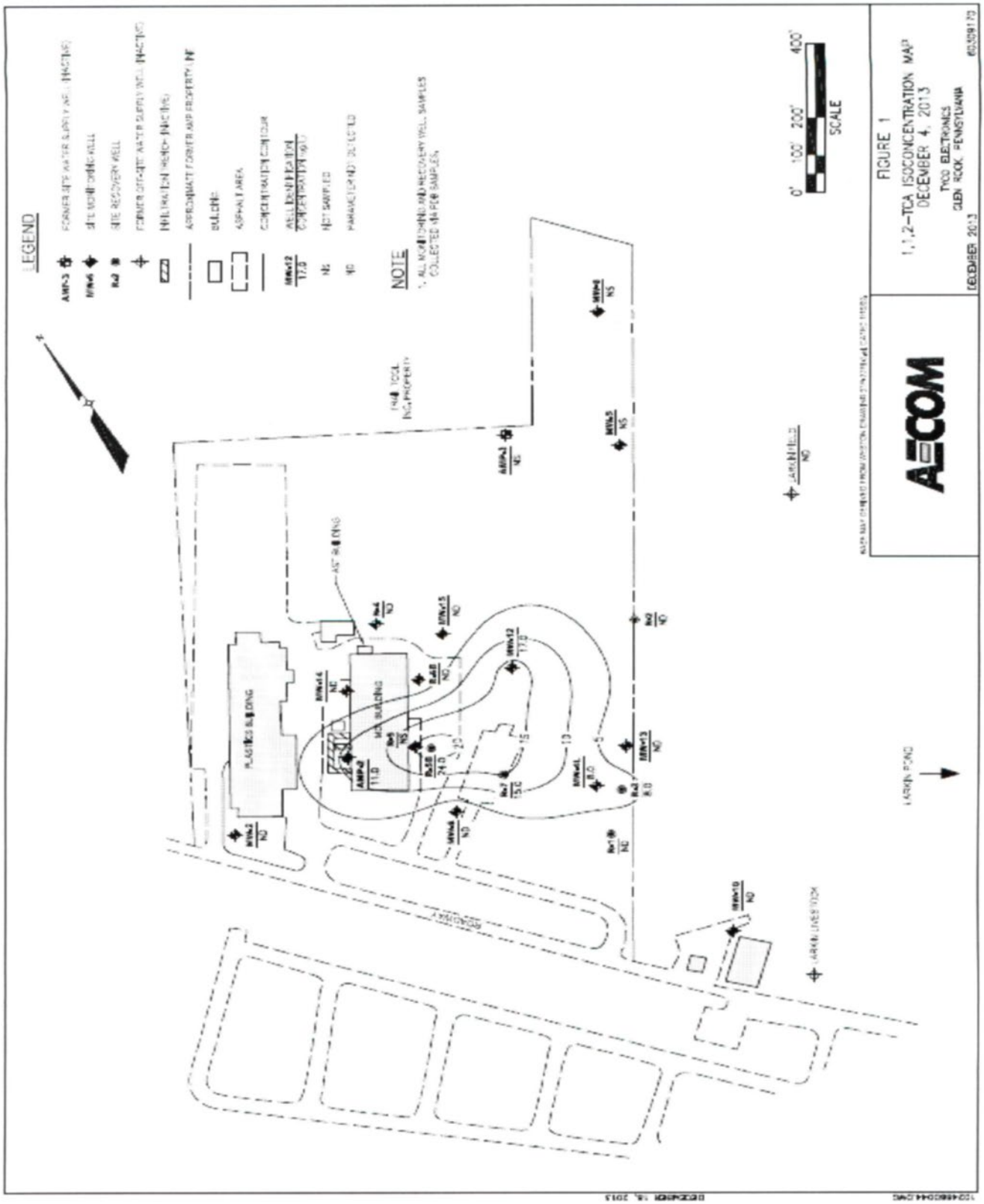
Current Site Status:
The Site is no longer a manufacturing and research facility. In 2003, TEC sold the property to Penn-Mar Organization who currently uses the facility as office space and a warehouse distribution center. Penn-Mar will continue to meet the requirements and activity limitations set forth in the environmental covenant.

Mapping:
The Facility property boundary has been geospatially mapped. A downloadable geospatial PDF map is available at the Facility's EPA Factsheet (https://www.epa.gov/hwcorrectiveactioncleanups/hazardous-waste-cleanup-tyco-electronics-formerly-amp-corporation-glen) under the "Reports, Documents and Photographs" section.

Conclusions:
TEC has demonstrated, to the satisfaction of EPA, that the terms of the AOC, including any additional tasks determined by EPA to be required pursuant to the AOC, have been satisfactorily completed. EPA terminated the AOC on July 20, 2017. All existing groundwater monitoring wells are decommissioned. EPA concludes that the implemented institutional controls are effective in meeting the objectives of protection of human health and the environment.

Files Reviewed:
TE Connectivity, Termination of AOC, Prepared by EPA July 2017.
TE Connectivity, Environmental Covenant, January 27, 2017.
TE Connectivity, Explanation of Significant Differences, Prepared by EPA January 27, 2017.
TE Connectivity, Petition for Closure, Prepared by TE Connectivity August 2015.

Map of Facility



Engineering Control/Institutional Control
Corrective Action Remedy Summary

Facility Name	TE Connectivity (formerly AMP Corporation)			
Address	10709 S. Susquehanna Trail, Glen Rock, PA 17327			
EPA ID Number	PAD041421223			
Are there restrictions or controls that address:	**Yes**	**No**	**Areas**	**Description of restrictions, controls, and mechanism**
Groundwater	x		Entire site	Environ. Covenant prohibits groundwater use.
Residential Use	x		Entire site	Environ. Covenant limits land use to non-residential
Excavation		x		
Vapor Intrusion		x		
Capped Areas		x		
Other Engineering Controls		x		
Other Restrictions		x		

LTS Checklist Template

IC Review and Assessment Questions:	**Yes**	**No**	**Notes**
• Have the ICs specified in the remedy been fully implemented? Implementation mechanism in place?	x		
• Do the ICs provide control for the entire extent of contamination (entire site or a specific portion)?	x		
• Are the ICs eliminating or reducing exposure of all potential receptors to known contamination?	x		
• Are the ICs effective and reliable for the activities (current and future) at the property to which the controls are applied?	x		
• Have the risk of potential pathway exposures addressed under Corrective Action changed based on updated screening levels and new technologies?		x	
• Are modifications to the IC implementation mechanism needed? (i.e. UECA Covenant, Permit or Order)		x	
• Are there plans to develop or sell the property?		x	Property sold to Penn-Mar. Organization in 2003.
• Have all reporting requirements been met?	x		

Groundwater Review and Assessment Questions:	**Yes**	**No**	**Notes**
• Is groundwater onsite used for potable purposes?		x	
• Is the Facility connected to a public water supply?	**x**		
• Have any new wells been installed at the facility?		x	
• Are the current groundwater flow rate and direction similar as mentioned in the previous studies?	x		
• Groundwater contaminants stable or decreasing in concentration?	x		
• Are groundwater monitoring wells still in place (# wells)?		x	

• Any evidence or reason to re-evaluate the number and location of monitoring points and/or monitoring frequency?		x	
• For wells where groundwater monitoring is no longer required, have the wells be decommissioned?	x		
• Is there evidence of monitored natural attenuation occuring in groundwater?	x		Based on historic data, naturual attenuation will continue to reduce levels to MCLs from the source area to the points of compliance.
• Has (active remediation system) been maintained as necessary?			N/A
• Is the (groundwater containment system) effectively containing COCs and protecting potential receptors (surface water body and/or groundwater resource) via hydraulic control?			N/A – No active remediation. No complete exposure pathways.
• Have notification letters been sent to the local POTW, County Department of Health, and Planning and Zoning Department regarding groundwater use restrictions?	x		Environ. covenant prohibits groundwater use at the site.

Surface and Subsurface Soil Review and Assessment Questions:	**Yes**	**No**	**Notes**
• Is the facility being used for residential purposes?		x	
• Have there been recent construction or earth-moving activities or plans for such?		x	

Engineered Cap or Cover Review and Assessment Questions:	**Yes**	**No**	**Notes**
• Have geosynthetic/vegetative landfill caps (name) been properly maintained?			N/A
• Have any repairs been necessary? (i.e. regrading, filling, root removal)			N/A
• Is the leachate collection system operating and effectively preventing groundwater contamination?			N/A

Vapor Intrusion Review and Assessment Questions:	**Yes**	**No**	**Notes**
• Have there been construction of new structures within the vapor intrusion restriction zone(s)?			N/A
• Is the vapor intrusion mitigation system radius of influence effective for the structure in which its installed?			N/A

Miscellaneous Review and Assessment Questions:	**Yes**	**No**	**Notes**
• Is the security fence intact?			N/A
• Is the appropriate signage posted?			N/A