

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

Application Type Amendment,
Major
Facility Type Industrial
Major / Minor Minor

Application No. PA0001937 A-1
APS ID 1090116
Authorization ID 1442724

Applicant and Facility Information

Applicant Name	<u>Pennsylvania Transformer Technology, Inc.</u>	Facility Name	<u>Canonsburg Plant</u>
Applicant Address	<u>30 Curry Avenue Canonsburg, PA 15317-1786</u>	Facility Address	<u>30 Curry Avenue Canonsburg, PA 15317-0440</u>
Applicant Contact	<u>Kevin Adams, Environmental Manager</u>	Facility Contact	<u>***same as applicant***</u>
Applicant Phone	<u>(724) 873-2329</u>	Facility Phone	<u>***same as applicant***</u>
Applicant Email	<u>kadams@patransformer.com</u>	Facility Email	<u>***same as applicant***</u>
Client ID	<u>84104</u>	Site ID	<u>241871</u>
SIC Code	<u>3612, 3613</u>	Municipality	<u>Cecil Township; Canonsburg Borough</u>
SIC Description	<u>Power, Distribution and Specialty Transformers; Switchgear and Switchboard Apparatus</u>	County	<u>Washington</u>
Date Application Received	<u>May 31, 2023</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u>June 12, 2023</u>	If No, Reason	<u>TMDL</u>
Purpose of Application	<u>Amendment of an NPDES permit to authorize the addition of new contaminated groundwater sources to Outfall 006.</u>		

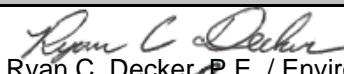
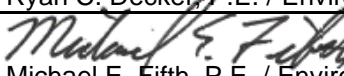
Summary of Review

On May 31, 2023, DEP received an application to modify NPDES Permit PA0001937 for discharges from Pennsylvania Transformer Technology, Inc.'s (PTTI) Canonsburg Plant. The application seeks to authorize the routing of additional groundwater sources to the 006 Treatment System, which discharges through Outfall 006.

In accordance with a Consent Order and Agreement dated April 14, 2005 and the First Amendment to the Consent Order and Agreement dated December 4, 2020, PTTI is implementing three plans to address groundwater and surface water contamination at the Canonsburg Plant: a Revised Former Tank Farm LNAPL Assessment Plan, a Revised Guardhouse Discharge Abatement Plan, and a UNT PCE Determination Plan. The plans were approved by DEP on August 5, 2022.

Pursuant to the Revised Former Tank Farm LNAPL Assessment Plan, PTTI proposes to use existing recovery well OW-2 to recover LNAPL from the Former Tank Farm Area. OW-2 has a diameter of ten inches, a depth of 39 feet, and consistently contains measurable LNAPL thickness. PTTI will use a submersible well pump to depress the groundwater table and a separate bladder pump located above the well pump to recover LNAPL from OW-2. Recovered product will be stored in a 55-gallon drum. The maximum pumping rate will be 10 gpm with an expected groundwater drawdown of at least two feet. Groundwater will be pumped to a 500-gallon aboveground batch tank in Building 61 from which the groundwater will be pumped across the site to the 006 Treatment System at a rate of up to 30 gpm.

Pursuant to the Revised Guardhouse Discharge Abatement Plan, PTTI proposes to use existing monitoring wells AP-6, AP-20, and AP-22 to recover LNAPL from the Guardhouse Discharge area. AP-6 has a diameter of eight inches and a depth of 30 feet. AP-20 has a diameter of eight inches and a depth of about 40 feet. AP-22 has a diameter of ten inches and a depth of 40 feet. PTTI will use a submersible well pump in each well to depress the groundwater table and a separate bladder pump located above the well pump in each well to recover LNAPL. Recovered product will be stored in one 55-gallon drum for each

Approve	Deny	Signatures	Date
✓		 Ryan C. Decker, P.E. / Environmental Engineer	October 13, 2023
X		 Michael E. Fifth, P.E. / Environmental Engineer Manager	October 20, 2023

Summary of Review

well. Groundwater from the AP wells will be pumped continuously to existing Manhole E from which groundwater will be pumped at a rate of up to 100 gpm to the 006 Treatment System.

Existing effluent limits for Outfall 006 (and Outfalls 001, 003, and 004, which discharge at the same location) were developed based on the design capacity of 006 Treatment System, 200 gpm. PTTI reported that the 006 Treatment System currently receives an average flow of 9 gpm. PTTI is not requesting modified effluent limits as part of this permit amendment, but changes to effluent limits may be requested in the future once groundwater flows from the Guardhouse Discharge area and Former Tank Farm Area are added to the 006 Treatment System.

To authorize the additional sources, the effluent description for Outfall 006 will be updated from:

Contaminated groundwater infiltration into the Abandoned Sanitary Sewer System and from the Guardhouse Seep Extraction System. Effluent also may include groundwater removed during Ameri-Precision Metals (tenant) construction operations.

to the following:

Contaminated groundwater infiltration into the Abandoned Sanitary Sewer System and contaminated groundwater pumped from wells in the vicinity of the Guardhouse Discharge and the Former Tank Farm Area. Effluent also may include groundwater removed during Ameri-Precision Metals (tenant) construction operations.

The revision allows for changes to extraction well configurations without the need to amend the permit to update the effluent description for Outfall 006.

The new effluent description for Outfall 006 will be added to a new limiting period that takes effect from the date the permit amendment takes effect to the upcoming interim date of February 28, 2025. This change leaves the old description to apply from the date the renewed permit took effect (March 1, 2021) through the date the permit amendment takes effect. The new effluent description also will apply to the limiting period from March 1, 2025 through the permit expiration date (February 28, 2026). All limits and monitoring requirements will remain unchanged.

On May 31, 2023, Pennsylvania Transformer Technology, Inc. (PTT) submitted a Water Quality Management (WQM) permit application to amend WQM Permit 6308202 to authorize the construction and operation of the four groundwater pumps and the four product recovery pumps in existing wells AP-6, AP-20, AP-22, and OW-2; the 500-gallon aboveground batch tank to collect groundwater from well OW-2; the 30-gpm transfer pump and the piping infrastructure necessary to pump groundwater from the storage tank for OW-2's groundwater to the 006 Treatment System; and the piping needed to convey groundwater from the 'AP' wells to Manhole E and then to the 006 Treatment System. WQM Permit 6308202 authorized the construction and operation of the 006 Treatment System.

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.	<u>006</u>	Design Flow (MGD)	<u>0.288</u>
Latitude	<u>40° 16' 00"</u>	Longitude	<u>-80° 10' 14"</u>
Quad Name	<u>Canonsburg</u>	Quad Code	<u>1604</u>

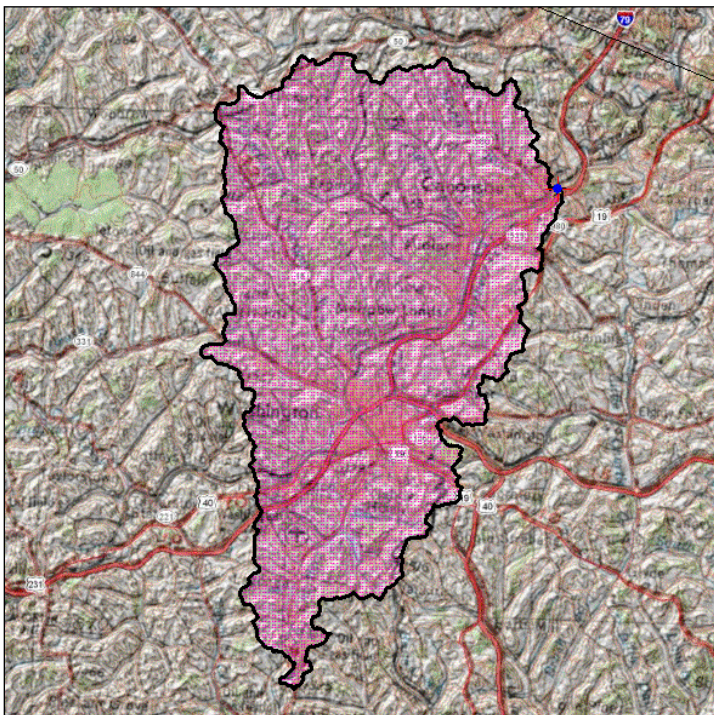
Contaminated groundwater infiltration into the Abandoned Sanitary Sewer System and contaminated groundwater pumped from wells in the vicinity of the Guardhouse Discharge and the Former Tank Farm Area. Effluent also may include groundwater removed during Ameri-Precision Metals (tenant) construction operations.

Wastewater Description:

Receiving Waters	<u>Chartiers Creek</u>	Stream Code	<u>36777</u>
NHD Com ID	<u>134396089</u>	RMI	<u>27.59</u>
Drainage Area	<u>87</u>	Yield (cfs/mi ²)	
Q7-10 Flow (cfs)	<u>2.00</u>	Q7-10 Basis	<u>USGS StreamStats</u>
Elevation (ft)		Slope (ft/ft)	<u>0.002</u>
Watershed No.	<u>20F</u>	Chapter 93 Class.	
Existing Use	<u>WWF</u>	Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Pathogens; PCB; Turbidity, Nutrients, Siltation</u>		
Source(s) of Impairment	<u>Unknown; Habitat Modification</u>		
TMDL Status	<u>Final; Final</u>	Name	<u>04/09/2001; 04/09/2003</u>

Nearest Downstream Public Water Supply Intake	<u>West View Borough Municipal Authority</u>		
PWS Waters	<u>Ohio River</u>	Flow at Intake (cfs)	
PWS RMI	<u>4.9</u>	Distance from Outfall (mi)	<u>approx. 30</u>

Watershed Basin Delineation for Outfall 006



Treatment Facility Summary				
Treatment Facility: 001 Treatment System				
WQM Permit No.	Issuance Date	Purpose		
6390201	February 28, 1991	Permit issued to Cooper Power Systems, Inc. for two 4500-gallon equalization tanks, two 105 gpm transfer pumps, a 1,000-gallon reaction and mix tank, four 66-gpm mixing/aeration pumps, two 500-gallon chemical storage tanks, three ½-hp chemical feed pumps, a 165-gpm clarifier, a 2-hp sludge pump, a 15 ft ³ filter press, an 800-gallon pH adjustment tank, and a 150-gallon aluminum chloride tank. This treatment system was later designated as the "001 Treatment System" or "Treatment System 001".		
6390201 A-1	November 6, 1997	Permit issued to Cooper Industries, Inc. for the addition of Oil Trap No. 35-11, a 40,000-gallon sedimentation basin, two multimedia granular filters, and two 20,000-pound carbon towers to Treatment System 001.		
6390201 A-2	June 7, 2005	Permit issued to Cooper Powers Systems, Cooper US, Inc., and Pennsylvania Transformer Technology, Inc. for upgrades to Treatment System 001 to increase its design capacity to 500 gpm. New treatment units included Pump Stations 001A and 001B with 500-gpm submersible pumps, Oil Trap No. 47-9 before Pump Station 001B, an "Oil Master" oil removal system and 330-gallon oil collection tank, oil skimmers for Sump 001B and the existing sedimentation basin, two multimedia granular filters (in addition to the two previously permitted), and parallel operation of the existing carbon towers to allow for the increased flow capacity.		
6390201 A-3	May 15, 2012	Permit issued to Pennsylvania Transformer Technology, Inc. and Cooper US, Inc. for two particulate multi-bag filters before the existing carbon filters, one particulate multi-bag filter after the existing carbon filters, and a new filter backwash system including a 20,000-gallon effluent storage tank to be used as a supply for filter backwash, a transfer pump for selective filter backwashing or effluent discharge from the effluent storage tank, a 20,000-gallon backwash collection tank (with mixing to keep solids in suspension) to collect backwash water, a transfer pump to transfer backwash water from the backwash collection tank to a filter press, and a filter press.		
6390201 A-4, T-1	July 14, 2021	Permit issued to Pennsylvania Transformer Technology, Inc. for the operation of the Winding Room Pit sump and oil/water separator constructed in July 2006 without a permit. This permit also removed Cooper US, Inc. as a co-permittee (classified as transfer).		
Waste Type	Degree of Treatment	Process Type	Disinfection	Hydraulic Design Cap. (MGD)
Industrial	Tertiary	Equalization, sedimentation, oil/water separation, multimedia filtration, carbon adsorption	N/A	0.72

Treatment Facility Summary				
Treatment Facility: 003 Treatment System				
WQM Permit No.	Issuance Date	Purpose		
6389202	February 4, 1992	Permit issued to Cooper Power Systems, Inc. for a 500-gallon surge tank, a coalescing filter with a 300-gallon holding tank, a 2,000-gallon equalization tank, and two 1,000-pound carbon filters in series. This treatment system was later designated as the "003 Treatment System" or "Treatment System 003". There is no amendment for this permit, but the Treatment System 003 currently consists of an equalization tank, and oil/water separator, a batch tank, a double diaphragm transfer pump, a 100-micron filter, two sets of progressively smaller filters in parallel with each parallel branch consisting of: three 100-micron filters in parallel, three 50-micron filters in parallel, three 20-micron filters in parallel, and three 5-micron filters in parallel for one branch and one 5-micron filter for the other; four carbon filters with one set of two parallel filters in series with another set of two parallel filters. The maximum design flow of the system is 10 gpm (0.0144 MGD).		
6389202 T-1	July 14, 2021	Permit transferred from Cooper Power Systems, Inc. to Pennsylvania Transformer Technology, Inc.		
Waste Type	Degree of Treatment	Process Type	Disinfection	Hydraulic Design Cap. (MGD)
Industrial	Tertiary	Equalization, oil/water separation, filtration, carbon adsorption	N/A	0.0144

Treatment Facility Summary				
Treatment Facility: Oil Traps and Oil Skimmer				
WQM Permit No.	Issuance Date	Purpose		
6397201	November 6, 1997	Permit issued to Cooper Industries, Inc. for Oil Traps 47-9 and 66-10 and an oil skimmer for Outfall 002.		
	July 14, 2021	The oil removal systems covered by this permit are authorized by WQM Permit 6390201 as part of the collection/pretreatment system (Pump Station 001B) for Outfall 001. This permit is considered to be terminated.		
Waste Type	Degree of Treatment	Process Type	Disinfection	Hydraulic Design Cap. (MGD)
Industrial	Primary	Oil/water separation	N/A	—

Treatment Facility Summary				
Treatment Facility: 006 Treatment System				
WQM Permit No.	Issuance Date	Purpose		
6308202	May 16, 2012	Permit issued to Pennsylvania Transformer Technology, Inc. and Cooper US, Inc. for Treatment System 006 including a wet well lift station (design flow rate of 100 gpm), Manhole 916.19 lift station (design flow rate of 100 gpm), a 4,500-gallon flow equalization / settling tank, a multi-bag pre-filter (5-microns) located before the granular activated carbon units, a UV disinfection unit, two 10,000-pound granular activated carbon units, a multi-bag post-filter (0.5 to 1.0 microns) located after the granular activated carbon units, and a 2,400-gallon, prefabricated, non-pressurized, polyethylene effluent surge tank.		
6308202 T-1	July 14, 2021	Permit issued to Pennsylvania Transformer Technology, Inc. and removed Cooper US, Inc. as a co-permittee (classified as transfer).		
6308202 A-1	Pending	Permit will authorize four 10-gpm groundwater depression pumps (2.5" dia. submersible well pumps) with VFD controls—one for each existing recovery well AP-6, AP-20, AP-22, and OW-2; four 2-inch SPG AutoGenie product recovery pump (or equivalent)—one for each existing recovery well AP-6, AP-20, AP-22, and OW-2—with selective LNAPL removal systems; three 55-gallon drums to store product recovered from AP-6, AP-20, and AP-22 (one drum per well); one new 500-gallon aboveground batch tank to store groundwater pumped from well OW-2; one vertical, multistage centrifugal transfer pump (30 gpm, 5-hp, 290 TDH) to transfer water from the 500-gallon tank to the treatment system; and accompanying piping and support facilities including, among other things, a new shed to house controls for the Guardhouse Discharge collection systems and conveyance piping from the extraction wells to the treatment system.		
Waste Type	Degree of Treatment	Process Type	Disinfection	Hydraulic Design Cap. (MGD)
Industrial	Tertiary	Equalization, sedimentation, pre-filtration, UV disinfection, carbon adsorption, post-filtration	Ultraviolet	0.288

Treatment Facility Summary				
Treatment Facility: 202 Treatment System				
WQM Permit No.	Issuance Date	Purpose		
6319200	July 8, 2019	Permit issued to Pennsylvania Transformer Technology, Inc. for the 202 Treatment System including one lift station with a 400-gpm submersible pump and backup, one 20,000-gallon equalization tank, two 200-gpm centrifugal transfer pumps, two pre-treatment bag filters in parallel, and two air stripper units in parallel.		
Waste Type	Degree of Treatment	Process Type	Disinfection	Hydraulic Design Cap. (MGD)
Industrial	Tertiary	Equalization, pre-filtration, air stripping	N/A	0.576