pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0244805**
Facility Type	**Industrial**	APS ID	**1021176**
Major / Minor	**Minor**	Authorization ID	**1322888**

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

Applicant and Facility Information

Applicant Name	**Parker Hannifin Corp**	Facility Name	**North Penn Area 6 Superfund(Frmly Precision Rebuilding Fac)**
Applicant Address	6035 Parkland Boulevard	Facility Address	422 W 6th Street
	Cleveland, OH 44124-4141		Lansdale, PA 19446-2262
Applicant Contact	Martha Connell	Facility Contact	Jacob Ferry
Applicant Phone	(216) 898-2710	Facility Phone	(484) 913-0300
Client ID	40393	Site ID	809990
SIC Code	9999	Municipality	Lansdale Borough
SIC Description	Public Admin. - Nonclassifiable Establishment	County	Montgomery
Date Application Received	August 5, 2020	EPA Waived?	Yes
Date Application Accepted	August 18, 2020	If No, Reason	
Purpose of Application	Permit Renewal.		

Summary of Review

The PA Department of Environmental Protection (PADEP) received an application from Environmental Resources Management (ERM) (consultant) on behalf of Parker Hannifin Corporation (permittee) on August 5, 2020 to renew NPDES permit PA0244805 for North Penn Area 6 Superfund (formerly Precision Rebuilding Facility) (facility). This is a minor IW facility without ELG (MIIW1). The facility discharges into a storm sewer to an UNT to W Br. Little Neshaminy Creek in state watershed 2-F. The existing permit was expired on January 31, 2021. The terms and conditions were automatically extended since the renewal application was received at least 180 days prior to expiration date. Renewal NPDES permit applications under Clean Water Program are not covered by PADEP's PDG, per 021-2100-001.

This fact sheet is developed in accordance with 40 CFR §124.56.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Approve	Deny	Signatures	Date
√		Reza H. Chowdhury, E.I.T. / Project Manager	August 6, 2021
X		*Pravin Patel* Pravin C. Patel, P.E. / Environmental Engineer Manager	08/09/2021

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.0144
Latitude	40º 15' 24.09"	Longitude	-75Âº 17' 20.23"
Quad Name		Quad Code	
Wastewater Description:	Groundwater Cleanup Discharge		
Receiving Waters	Unnamed Tributary to West Branch Neshaminy Creek (WWF, MF)	Stream Code	02889
NHD Com ID	25484806	RMI	1.200
Drainage Area	1.05	Yield (cfs/mi^2)	0.01
Q_{7-10} Flow (cfs)	0.0103	Q_{7-10} Basis	Previous fact sheet
Elevation (ft)		Slope (ft/ft)	
Watershed No.	2-F	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	NUTRIENTS		
Source(s) of Impairment	MUNICIPAL POINT SOURCE DISCHARGES		
TMDL Status	Final, 04/09/2003 (withdrawn) Name Neshaminy Creek		
Nearest Downstream Public Water Supply Intake	Aqua PA Main Sys		
PWS Waters	Neshaminy Creek	Flow at Intake (cfs)	
PWS RMI	9.04	Distance from Outfall (mi)	38.73

Changes Since Last Permit Issuance: None

Other Comments: Previous fact sheet accompanying 2016 permit indicated the Outfall 001 discharges into an onsite storm sewer inlet which flows approximately 0.5 miles north to the point of discharge on the surface water body, an UNT to West Branch Neshaminy Creek. The fact sheet calculated a drainage area at the confluence to be 1.05 mi^2 with a Q_{7-10} flow of 0.0103 cfs by utilizing USGS StreamStats website. This renewal will utilize the same data for calculating limits, as applicable.

PWS Intake: The nearest downstream PWS intake is Aqua PA Main System on Neshaminy Creek at RMI 9.04, which is approximately 38.73 miles downstream of discharge point.

Anti-degradation Requirement: Chapter 93.4a(b) of the Department's rules and regulations require that "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." The secondary stream, UNT to West Branch Neshaminy Creek is classified as Warm Water Fishery (WWF), and Migratory Fishes (MF.) The Anti-degradation requirements are not applicable for this discharge.

Class A Wild Trout Streams:
No Class A Wild Trout Streams are impacted by this discharge.

303d Listed Streams:
The discharge is located in a stream segment of UNT to West Branch Neshaminy Creek which is impaired for nutrients from municipal point source discharges. USEPA finalized a TMDL for Neshaminy Creek in April 9, 2003 nutrient portion of which was withdrawn.

Treatment Facility Summary				
Treatment Facility Name: North Penn Area 6 Superfund Former Precision Rebuilding Facility GWCU				
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Industrial				
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**

Changes Since Last Permit Issuance: None

Facility Description:

This Fact Sheet summarizes the evaluation of **Parker Hannifin Corporation's** application for a renewal NPDES Permit to continue discharge 14,400-gpd of treated groundwater from an air stripping remediation system serving the **Former Precision Rebuilding Facility** to an unnamed tributary to West Branch Neshaminy Creek (Pa Stream Code 02889).

The **Former Precision Rebuilding Facility** is one of approximately 24 potentially responsible party (PRP) facilities within the North Penn Area 6 Superfund Site. The site is one of several North Penn Area 6 Superfund sites properties in the North Penn Water authority (NPWA) service district in Montgomery County, Pennsylvania.

The North Penn Area 6 Superfund Site was designated in 1979 when the NPWA discovered TCE in eight water supply wells located in the Lansdale area. The USEPA required that facilities within the boundaries of the North Penn Area 6 Superfund site with histories of chlorinated solvent use complete Remedial Investigation/Feasibility Studies (RI/FS) on the source-control operable unit (OU), including soil sampling to determine the nature and extent of potential contamination sources.

Subsequent investigations lead to the EPA issuing a Record of Decision (ROD) for OU3 that identified the contaminants of concern as tetrachloroethylene (PCE), trichloroethylene (TCE), cis 1,2-dichloroethylene (cis 1,2-DCE), and vinyl chloride.

Two recovery wells with in-well pneumatic-powered pumps pump groundwater that is pretreated with a hardness sequestering agent to an equalization tank. Flow from the equalization tank is pumped to the air stripper. Stripper off-gas is treated with vapor-phase carbon. Treated water is discharged to a municipal storm sewer via Outfall 001, that discharges to an UNT to the West Branch Neshaminy Creek. The air stripper was designed to discharge non-detect concentration (<1 ppb) of the pollutant of concerns at the worst case scenario. Redux 390 is added in the system at a rate of 5.6 lbs./day in continuous dose to sequester iron from depositing in the system.

The treatment system began operating in August 2015. The system was anticipated to continue operating for a period on the order of 10 years.

Compliance History

DMR Data for Outfall 001 (from July 1, 2020 to June 30, 2021)

Parameter	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20
Flow (MGD) Average Monthly	0.01187	0.01346	0.01375	0.01431	0.01411	0.01164	0.01313	0.01353	0.01251	0.01361	0.01375	0.00669
pH (S.U.) Instantaneous Minimum	8.2	8.2	8.3	8.2	8.0	8.2	8.1	8.3	8.2	8.3	8.3	8.2
pH (S.U.) Instantaneous Maximum	8.2	8.2	8.3	8.2	8.0	8.2	8.1	8.3	8.2	8.3	8.3	8.2
cis-1,2-Dichloroethylene (mg/L) Average Monthly	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
cis-1,2-Dichloroethylene (mg/L) Instantaneous Maximum	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Tetrachloro-ethylene (mg/L) Average Monthly	< 0.003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Tetrachloro-ethylene (mg/L) Instantaneous Maximum	< 0.0003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Trichloroethylene (mg/L) Average Monthly	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Trichloroethylene (mg/L) Instantaneous Maximum	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Vinyl Chloride (mg/L) Average Monthly	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Vinyl Chloride (mg/L) Instantaneous Maximum	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003

Other comments: No effluent violations noted.

Existing Effluent Limitations and Monitoring Requirements

For Outfall 001 (from February 1, 2016 to January 31, 2021)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) [1]		Concentrations (mg/L)				Minimum [2] Measurement Frequency	Required Sample Type
	Average Monthly		Instant. Minimum	Average Monthly		Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/month	Grab
cis-1,2-Dichloroethylene	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab
Tetrachloroethylene	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab
Trichloroethylene	XXX	XXX	XXX	0.005	XXX	0.013	1/month	Grab
Vinyl Chloride	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .0144
Latitude 40º 14' 56.50" **Longitude** -75º 17' 10.02"
Wastewater Description: Groundwater Cleanup Discharge

Technology-Based Limitations

Comments: Effluent Limitation Guidelines (ELGs) have not been developed for Discharges from Chlorinated Solvent Product Contaminated Groundwater Remediation Systems. In the absence of ELGs, technology limits are based on Best Professional Judgment (BPG) as authorized by Section 402(a)(1) of the Clean Water Act. In developing these limits, the specific factors required in 40 CFR Part 125.3(d) were considered during the last permit issuance.

Water Quality-Based Limitations

This facility discharges to a storm sewer that flows approximately ½ mile prior to discharging to a surface water body. There are several existing TCE contaminated properties in the general North Penn Area that discharge treated groundwater to dry swales. Those treatment facilities received water quality based effluent limits based on interpretation of the former "Implementation Guidance for Evaluating Wastewater Discharges to Drainage Ditches and Swales (391-2000-014). The former guidance has been replaced with the "Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales and Storm Sewers". Nonetheless, the recommended water quality-based effluent limit for the **Former Precision Rebuilding Facility** is consistent with the other groundwater remediation systems located in the general North Penn Area.

Generally, effluent limits to storm sewers are established to ensure protection of groundwater for drinking water use, using the following considerations:

1. If a maximum contaminant level (MCL) has been promulgated for a chemical in question, the MCL is the permit limit.

2. If no MCL has been finalized, the effluent limit will be set equal to the human health based criterion developed specifically for groundwater.

Parameter Name	Units	Aquatic Life		Human Health			Permit Limit
		CCC	CMC	H	CRL	MCL	
Trichloroethylene (TCE)	ug/l	450	2300	---	2.5	5	5

Flow:
The volume of effluent discharged from each outfall should be monitored, per 40 CFR § 122.44(i)(1)(ii).

pH:
The existing Minimum pH of 6.0 S.U. and Maximum pH of 9.0 S.U. limits will be continued per 25 Pa. Code § 95.2(1)

cis-1,2-Dichloroethylene:
This is an existing pollutant of concern that has monthly monitoring only requirement in current permit. This pollutant was identified in the ROD as contaminant of concern. A review of last 12 months eDMR data indicated a non-detect results for all sample results (<0.1 ug/l and <0.2 ug/l). The applicable SDW MCL is 7 ug/l, therefore, the discharge concentration doesn't warrant a numerical limit. Existing monitoring only requirement will be continued to be consistent with ROD.

Tetrachloroethylene:
This is an existing pollutant of concern that has monthly monitoring only requirement in current permit. This pollutant was identified in the ROD as contaminant of concern. A review of last 12 months eDMR data indicated a non-detect results for all sample results (<0.2 ug/l). The applicable SDW MCL is 5.0 ug/l, therefore, the discharge concentration doesn't warrant a numerical limit. Existing monitoring only requirement will be continued to be consistent with ROD.

Trichloroethylene:
This is an existing pollutant of concern that has average monthly limit of 5.0 ug/l and IMAX of 13.0 ug/l in current permit. A review of last 12 months eDMR data indicated a non-detect results for all sample results (<0.2 ug/l) for both average monthly and IMAX. The applicable SDW MCL is 5.0 ug/l which is much higher than actual discharge concentration. However, due to federal anti-backsliding policy, existing limits will be continued to be consistent with ROD.

Vinyl Chloride
This is an existing pollutant of concern that has monthly monitoring only requirement in current permit. This pollutant was identified in the ROD as contaminant of concern. A review of last 12 months eDMR data indicated a non-detect results for all sample results (<0.3 ug/l). The applicable SDW MCL is 2.0 ug/l, therefore, the discharge concentration doesn't warrant a numerical limit. Existing monitoring only requirement will be continued to be consistent with ROD.

All other pollutants listed in the Module 2-Groundwater Remediation Systems are marked as believed absent and their maximum reported concentration are much lower than applicable SDW's MCLs. Therefore, none of them are considered as PoC and don't warrant a monitoring or limits requirements in this renewal.

Anti-Backsliding
Proposed limits are at least as stringent as existing permit, therefore, anti-backsliding policy is not applicable.

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	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
cis-1,2-Dichloroethylene	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab
Tetrachloro-ethylene	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab
Trichloroethylene	XXX	XXX	XXX	0.005	XXX	0.013	1/month	Grab
Vinyl Chloride	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab

Compliance Sampling Location: Monitoring point is sampling port prior to discharge to storm sewer system

Other Comments: None