pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

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

Application Type	**Renewal**	Application No.	**PA0052949**
Facility Type	**Industrial**	APS ID	**1033787**
Major / Minor	**Minor**	Authorization ID	**1345734**

Applicant and Facility Information

Applicant Name	**Aqua Pennsylvania, Inc.**	Facility Name	**Milford Well Station WFP**
Applicant Address	762 W. Lancaster Avenue	Facility Address	10 Meadow Lane
	Bryn Mawr, PA 19010		Downingtown, PA 19335
Applicant Contact	Michael Giampietro	Facility Contact	Michael Giampietro
Applicant Phone	(484) 238-4815	Facility Phone	(484) 238-4815
Client ID	309251	Site ID	253006
SIC Code	4941	Municipality	Upper Uwchlan Township
SIC Description	Trans. & Utilities - Water Supply	County	Chester
Date Application Received	March 5, 2021	EPA Waived?	No
Date Application Accepted		If No, Reason	Discharge to TMDL waters DEP Discretion

Purpose of Application: Permit Renewal.

Summary of Review

The applicant requests renewal of an NPDES permit to discharge treated filter backwash water and groundwater from the Milford Well Station which is a potable well water treatment and booster station. The discharges from Outfalls 001 and 002 enter a storm drain system that leads to an unnamed tributary to Marsh Creek. The storm drain goes under Water View Road through a small swale prior to intersecting another swale that leads to the unnamed tributary to Marsh Creek. Marsh Creek in turn is a tributary to East Branch Brandywine Creek.

The site has been optimized requiring each of the two filters to be backwashed once per week. The supernatant wash water is collected in the supernatant tank and recycled back to the filters. The settled sludge is emptied by a vacuum truck and disposed of at a licensed waste facility. The supernatant can be discharged to Outfall 001 in the event that additional backwashes are needed or if pumps and/or filters are taken offline for repairs. Outfall 002 is an emergency only discharge for raw untreated groundwater during start up or shut down or other maintenance events. There had been no discharge since last two permit renewal for about ten years.

Effluent limits in the existing permit for Outfall 001, are recommended to continue for this permit renewal. These are based on the Department's guidance document, Technology-Based Control Requirements for Water Treatment Plant Wastes except for Aluminum. For Aluminum the WQBEL calculated previously using DEP's PENTOXSD model (3.3 mg/l) was more stringent than BPT limit and is used in the permit. Monitoring requirements for Chlorodibromomethane, Dichlorobromomethane and Chloroform are also continuing in this permit renewal.

DRBC has effluent limit for TSS that is numerically the same as BPT. TRC and pH limits from Chapter 93 are numerically the same as BPT.

Approve	Deny	Signatures	Date
X		*Ketan Thaker* Ketan Thaker / Project Manager	January 13, 2022
X		**Pravin Patel** Pravin C. Patel, P.E. / Environmental Engineer Manager	01/13/2022

Summary of Review

The BPT limits listed in the guidance are as follows:

Parameter	Monthly Avg (mg/l)	Daily Max (mg/l)
Suspended Solids	30	60
Iron (Total)	2	4
Aluminum (Total)	4	8
Manganese (Total)	1	2
Flow	Monitor	
pH	6.0 to 9.0 at all times	
Total Residual Chlorine	0.5	1.0

This discharge is listed under Christina River Basin Low Flow TMDL, the alternate reduction scenario approved by EPA on august 29, 2012. This was not a part of the original TMDL issued in 2001, the initial report says that water filtration plant backwash facilities were not included in the allocation analysis, since a model run covering all small discharges indicated that the daily average DO and minimum DO were protected at all locations in the Christina River Basin. It also said filtration backwash facilities only discharges as needed and not on continual basis.

Currently no data is available for the TMDL parameters CBOD5, NH3-N, TN, TP and DO, therefore, monitoring will continue at Outfall 001 for these parameters. This is appropriate in order to gather data to determine if there is a reasonable potential to exceed the WLAs assigned to this facility in the TMDL.

Christina River Basin High Flow TMDL addresses Bacteria and Sediment and WLAs are assigned for TSS and Fecal Coliform for this facility. The existing effluent limit/ monitoring requirement for TSS at outfall 001 is adequate to characterize the TSS levels discharging from this facility. Since this is a potable water treatment plant operation with sodium hypochlorite treatment and the discharge is filter back wash, there is no reason to expect the presence of Fecal Coliform in the discharge. Therefore, Fecal Coliform is not included in the permit.

The Christina River Basin High Flow TMDL for bacteria and sediment assigned a TSS WLA of 20 mg/l and 0.23 kg/day (0.5 lbs/day) for this discharge. However, the facility has not discharged within the last 5 years and has no RP to exceed the TMDL WLA, the existing limit of 30 mg/l based on BPT will continue for this permit renewal. This facility is also affected by the High Flow TMDL for nutrients and DO.

Based on the no discharge event for the last five years, currently there is no reasonable potential for any TMDL parameters to exceed the TMDL WLAs.

For Outfall 002, the existing effluent limits for pH (6.0 to 9.0 std) and TRC (0.5 mg/l Avg. Mo., and 1.0 mg/l Imax) are recommended to continue to this permit renewal.

Act 14 Notification to Upper Uwchlan Township on February 9, 2021
Act 14 Notification to Chester County on February 8, 2021

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)	.003
Latitude	40Âº 4' 26.64"	Longitude	-75Âº 42' 42.28"
Quad Name	Downingtown	Quad Code	08-21-3
Wastewater Description:	Water Treatment Effluent (filter back wash)		
Receiving Waters	UNT to Marsh Creek (HQ-TSF, MF)	Stream Code	00333
NHD Com ID	26089610	RMI	1.2
Drainage Area	0.17 mi^2	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	0.018	Q_{7-10} Basis	Previous WQPR
Elevation (ft)	362 ft	Slope (ft/ft)	
Watershed No.	3-H	Chapter 93 Class.	HQ-TSF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Christina River Basin

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	.144
Latitude	40Âº 4' 33.00"	Longitude	-75Âº 42' 34.00"
Quad Name	Downingtown	Quad Code	08-21-3
Wastewater Description:	Groundwater / Spring Discharge		
Receiving Waters	Unnamed Tributary to Marsh Creek (HQ-TSF, MF)	Stream Code	
NHD Com ID	26089274	RMI	
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-H	Chapter 93 Class.	HQ-TSF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Christina River Basin

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Treatment Facility Summary				
Treatment Facility Name: Milford Well Station Water Filtration Plant				
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Industrial			Hypochlorite	0.003
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
		Not Overloaded		

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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/discharge	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/discharge	Grab
DO	XXX	XXX	Report Inst Min	XXX	XXX	XXX	1/discharge	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.0	1/discharge	Grab
CBOD5	XXX	XXX	XXX	Report	XXX	XXX	1/discharge	Grab
TSS	0.75	1.5	XXX	30	60	75	1/discharge	Grab
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/discharge	Grab
Ammonia	XXX	XXX	XXX	Report	XXX	XXX	1/discharge	Grab
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/discharge	Grab
Total Aluminum	0.08	0.16	XXX	3.3	6.6	8.3	1/discharge	Grab
Total Iron	0.05	0.10	XXX	2.0	4.0	5	1/discharge	Grab
Total Manganese	0.025	0.05	XXX	1.0	2.0	2.5	1/discharge	Grab
Chlorodibromo-methane	XXX	XXX	XXX	Report	XXX	XXX	1/discharge	Grab

Outfall 001, Continued (from 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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Dichlorobromo-methane	XXX	XXX	XXX	Report	XXX	XXX	1/discharge	Grab
Chloroform	XXX	XXX	XXX	Report	XXX	XXX	1/discharge	Grab

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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) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/discharge	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/discharge	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.0	1/discharge	Grab