pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0062898**
Facility Type	**Industrial**	APS ID	**616146**
Major / Minor	**Minor**	Authorization ID	**1322746**

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

Applicant and Facility Information

Applicant Name	**PA American Water Co.**	Facility Name	**PA American Water Watres WTP**
Applicant Address	2699 Stafford Avenue	Facility Address	1799 Jumper Road
	Scranton, PA 18505-3608		Wilkes Barre, PA 18702-8032
Applicant Contact	Nancy Donahue	Facility Contact	Ron Temple
Applicant Phone	(570) 696-2878	Facility Phone	(570) 457-1550
Client ID	87712	Site ID	449229
SIC Code	4941	Municipality	Plains Township
SIC Description	Trans. & Utilities - Water Supply	County	Luzerne
Date Application Received	August 3, 2020	EPA Waived?	Yes
Date Application Accepted	August 7, 2020	If No, Reason	

Purpose of Application: RENEWAL OF AN EXISTING IW NPDES PERMIT.

Summary of Review

The applicant is requesting renewal of an NPDES permit to discharge 0.034 MGD of treated filter backwash water and other low volume wastewaters from the Watres WTP to Deep Creek, a CWF/MF designated receiving stream in state water plan basin 5-B (Toby – Wapwallopen Creeks). Per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than its designated use. Outfall 001 discharges only under emergency or unusual conditions. The facility generally recycles 100% of its process water. DMR data shows that the most recent discharge was in November 2019. The discharge is not expected to affect public water supplies as this is the regional water company.

This is a public water supply Water Treatment Plant (SIC# 4941; NAICS# 22131). The technology-based limits for TSS, Iron, Manganese, pH, and TRC are consistent with Department guidance (Technology-Based Control Requirements for Water Treatment Plant Wastes, Doc. No. 362-2183-003). The Aluminum & TRC effluent limitations are water quality-based. All limits will be retained unchanged from the previous Permit.

These BPT technology-based effluent control requirements subject to water quality modelling are:

1) Filter backwash wastewater, or waste sludges generated from pre-sedimentation, coagulation/settling, water softening, or iron/manganese removal processes cannot be discharged to surface waters of the Commonwealth unless the following effluent quality can be achieved:

PARAMETER	MONTHLY AVERAGE (mg/l)	DAILY MAX (mg/l)
Suspended Solids	30	60
Iron (total)	2	4
Aluminum (total)	4	8
Manganese (total)	1	2
pH	6-9 (at all times)	

Approve	Deny	Signatures	Date
X		Bernard Feist, P.E. / Environmental Engineer	August 21, 2020
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	9-25-20

Summary of Review

2) Wastewater from regeneration of ion-exchange softening units cannot be directly discharged to surface waters unless no other acceptable disposal options exist within the financial capability of the discharger.

The WMS Report query “Water Management System Inspections” was run. On 07/09/2014 a Routine/Partial Inspection was done with No Violations noted.

The WMS “Open Violations by Client Report" was run and there four Open Violations.

Client ID: 87712
Client: All

CLIENT ID	PF ID	FACILITY	PROGRAM SPECIFIC ID	INSP ID	VIOLATION ID	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR	INSP REGION
87712	269909	PA AMERICAN WATER COMPANY SCRANTON WWTP	PA0026492	3005028	878762	12/20/2019	92A.46	NPDES - Violation of Part C permit condition(s)	GOLOBEK, DAVID	NERO
87712	277361	MCKEESPORT STP	PA0026913	3047676	887295	06/18/2020	92A.44	NPDES - Violation of effluent limits in Part A of permit	SPECHT, DUSTIE	SWRO
87712	277361	MCKEESPORT STP	PA0026913	3047676	887296	06/18/2020	92A.61(C)	NPDES - Failure to monitor pollutants as required by the NPDES permit	SPECHT, DUSTIE	SWRO
87712	280992	PA AMER WATER POCONO COUNTRY PLACE WWTP	PA0060097	2974784	871745	12/23/2019	92A.46	NPDES - Violation of Part C permit condition(s)	ACKERS, DANIEL	NERO

The application was received 8/3/20 and expires 1/31/20.

Public Participation

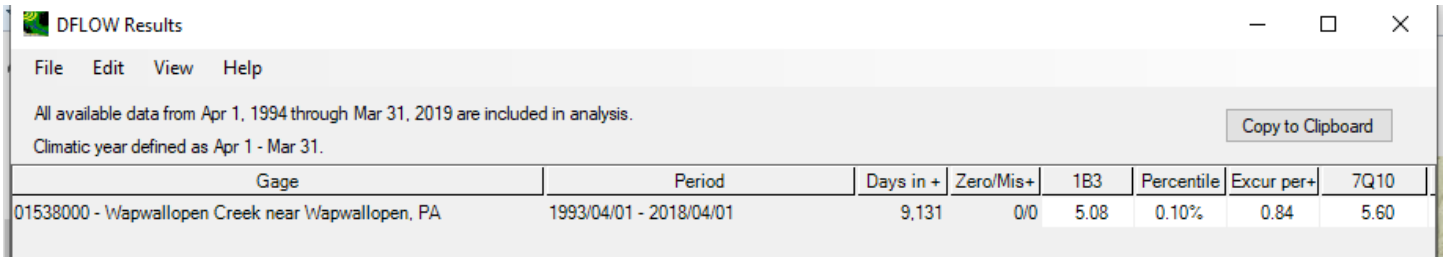
DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested 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)	.034
Latitude	41º 15' 45"	Longitude	-75º 47' 30"
Quad Name	Pittston	Quad Code	0839
Wastewater Description:	**Normally No Discharge** of Filter backwash, flocculator drainage, drainage from sample sinks, plant floor drains, plant roof drains, drying beds, parking/ unloading areas, and plant overflow.		

Receiving Waters	Deep Creek (CWF, MF)	Stream Code	63012
NHD Com ID	65633241	RMI	0.8
Drainage Area	1.0 mi^2	Yield (cfs/mi^2)	0.13
Q_{7-10} Flow (cfs)	0.13	Q_{7-10} Basis	USGS-01538000 Dflow
Elevation (ft)		Slope (ft/ft)	
Watershed No.	5-B	Chapter 93 Class.	CWF
Existing Use	**na**	Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Not Assessed		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	**Final**	Name	Susquehanna River Metals

Nearest Downstream Public Water Supply Intake	Danville Borough Municipal Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	122.5	Distance from Outfall (mi)	~58



STATION.--01538000 WAPWALLOPEN CREEK NEAR WAPWALLOPEN, PA
LOCATION.--Lat 41`03' 34", long 76`05' 39", Luzerne County, Hydrologic Unit 02050107, on left bank 12 ft downstream from Harts Bridge on SR 3012, 2.2 mi southeast of Wapwallopen, and 3.7 mi upstream from mouth.
DRAINAGE AREA.--43.8 square miles.
PERIOD OF RECORD.--October 1919 to current year.
Q7-10 LowFlowYield (cfs/mi2)= 5.60 / 43.8 = 0.13

Outfall 001 at RMI 0.8 …… Elevation 1474 ft

Clicked Point (Latitude, Longitude): 41.27560, -75.72612
Time: 2020-08-19 14:41:38 -

Low-Flow Statistics Parameters[Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units
DRNAREA	Drainage Area	1	square miles

RMI 0.0 Elevation 1,174

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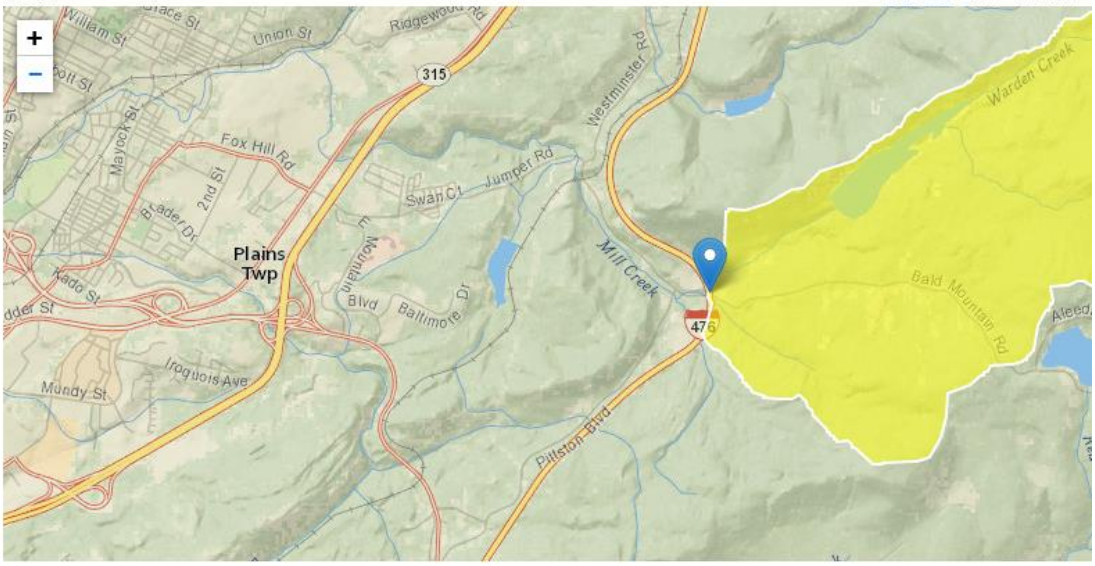


Low-Flow Statistics Parameters[Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units
DRNAREA	Drainage Area	5.48	square miles

Water Quality Modeling

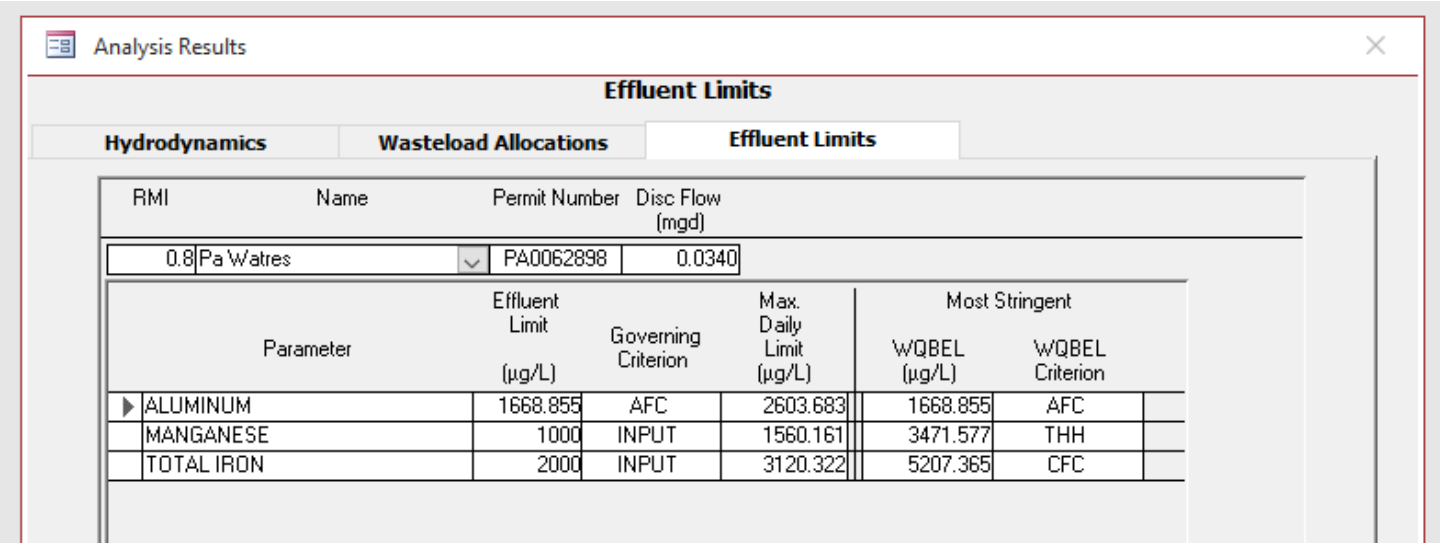
TOXICS SCREENING ANALYSIS
WATER QUALITY POLLUTANTS OF CONCERN
VERSION 2.7

CLEAR FORM

Facility: **Pa Watres** NPDES Permit No.: **PA0062898** Outfall: **001**
Analysis Hardness (mg/L): **21** Discharge Flow (MGD): **0.034** Analysis pH (SU): **7**
Stream Flow, Q_{7-10} (cfs): **0.13**

	Parameter	Maximum Concentration in Application or DMRs (µg/L)	Most Stringent Criterion (µg/L)	Candidate for PENTOXSD Modeling?	Most Stringent WQBEL (µg/L)	Screening Recommendation
Group 1	Total Dissolved Solids	30000	500000	No		
	Chloride	15000	250000	No		
	Bromide	1000	N/A	No		
	Sulfate	12500	250000	No		
	Fluoride	100	2000	No		
Group 2	Total Aluminum	4000	750	Yes	1668	Establish Limits
	Total Antimony		5.6			
	Total Arsenic		10			
	Total Barium	30	2400	No		
	Total Beryllium		N/A			
	Total Boron		1600			
	Total Cadmium		0.271			
	Total Chromium		N/A			
	Hexavalent Chromium		10.4			
	Total Cobalt		19			
	Total Copper		9.3			
	Total Cyanide		N/A			
	Total Iron	2000	1500	Yes	5207	Monitor
	Dissolved Iron		300			
	Total Lead		3.2			
	Total Manganese	1000	1000	Yes	3471	Monitor
	Total Mercury		0.05			
	Total Molybdenum		N/A			
	Total Nickel		52.2			
	Total Phenols (Phenolics)		5			
	Total Selenium		5.0			
	Total Silver		3.8			
	Total Thallium		0.24			
	Total Zinc	20	119.8	No		

Pentox



TRC EVALUATION			
Input appropriate values in A3:A9 and D3:D9		Pa Watres	
0.13	= Q stream (cfs)	0.5	= CV Daily
0.034	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.807	1.3.2.iii	WLA cfc = 0.780
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.301	5.1d	LTA_cfc = 0.453

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.370	AFC

Compliance History

DMR Data for Outfall 001 (from July 1, 2019 to June 30, 2020)

Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19
Flow (MGD) Average Monthly								0.021				
Flow (MGD) Daily Maximum								**0.252**				
Duration of Discharge (minutes) Average Monthly								22				
Duration of Discharge (minutes) Daily Maximum								480				
pH (S.U.) Minimum								6.3				
pH (S.U.) Maximum								6.5				
TRC (mg/L) Average Monthly								0.03				
TRC (mg/L) Instantaneous Maximum								0.04				
TSS (mg/L) Average Monthly								14.9				
TSS (mg/L) Daily Maximum								16.3				
TSS (mg/L) Instantaneous Maximum								16.3				
Total Aluminum (lbs/day) Average Monthly								**11.1**				
Total Aluminum (lbs/day) Daily Maximum								**26.5**				
Total Aluminum (mg/L) Average Monthly								**5.67**				

Total Aluminum (mg/L) Daily Maximum								**12.6**				
Total Aluminum (mg/L) Instantaneous Maximum								**12.6**				
Total Barium (mg/L) Average Monthly								0.03				
Total Barium (mg/L) Daily Maximum					6			0.03				
Total Iron (mg/L) Average Monthly								< 0.32				
Total Iron (mg/L) Daily Maximum								0.56				
Total Iron (mg/L) Instantaneous Maximum								0.56				
Total Manganese (mg/L) Average Monthly								0.28				
Total Manganese (mg/L) Daily Maximum								0.59				
Total Manganese (mg/L) Instantaneous Maximum								0.59				
Total Zinc (mg/L) Average Monthly								< 0.02				
Total Zinc (mg/L) Daily Maximum								< 0.02				