pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0009431**
Facility Type	**Industrial**	APS ID	**996636**
Major / Minor	**Minor**	Authorization ID	**1279086**

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

Applicant and Facility Information

Applicant Name	**PA American Water Co.**	Facility Name	**White Deer Creek Filter Plant**
Applicant Address	105 Sodom Road	Facility Address	White Deer Pike
	Milton, PA 17847-9232		White Deer, PA 17887
Applicant Contact	Scott Sharp	Facility Contact	Laura Walter
Applicant Phone	(570) 538-4438	Facility Phone	(570) 742-4612
Client ID	87712	Site ID	257187
SIC Code	4941	Municipality	White Deer Township
SIC Description	Trans. & Utilities - Water Supply	County	Union
Date Application Received	July 1, 2019	EPA Waived?	Yes
Date Application Accepted	July 16, 2019	If No, Reason	

Purpose of Application: Renewal of NPDES Permit No. PA0009431 for the discharge of water treatment plant wastewater.

Summary of Review

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
X		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	April 22, 2020
X		Thomas M. Randis / Environmental Program Manager	April 22, 2020

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.001
Latitude	41° 4’ 17.90”	Longitude	76° 57’ 40.70”
Quad Name	Allenwood	Quad Code	1030
Wastewater Description:	Water Treatment Plant Wastewater		
Receiving Waters	White Deer Creek (HQ-CWF)	Stream Code	19183
NHD Com ID	66919007	RMI	15.76
Drainage Area	37.8 mi^2	Yield (cfs/mi^2)	0.223
Q_{7-10} Flow (cfs)	8.43	Q_{7-10} Basis	USGS #01553130
Elevation (ft)	660	Slope (ft/ft)	N/A
Watershed No.	10-C	Chapter 93 Class.	HQ-CWF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Attaining		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	None	Name	N/A
Nearest Downstream Public Water Supply Intake	PA-American Water – Milton		
PWS Waters	West Branch Susquehanna River	Flow at Intake (cfs)	679.7
PWS RMI	10.66	Distance from Outfall (mi)	12

Changes Since Last Permit Issuance: None

Other Comments: N/A

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0.001
Latitude	41º 4' 10.70"	Longitude	76° 57' 40.70"
Quad Name	Allenwood	Quad Code	1030
Wastewater Description:	Water Treatment Plant Wastewater		
Receiving Waters	White Deer Creek (HQ-CWF)	Stream Code	19183
NHD Com ID	66919007	RMI	15.76
Drainage Area	37.8 mi^2	Yield (cfs/mi^2)	0.223
Q_{7-10} Flow (cfs)	8.43	Q_{7-10} Basis	USGS #01553130
Elevation (ft)	660	Slope (ft/ft)	N/A
Watershed No.	10-C	Chapter 93 Class.	HQ-CWF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Attaining		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	None	Name	N/A
Nearest Downstream Public Water Supply Intake	PA-American Water – Milton		
PWS Waters	West Branch Susquehanna River	Flow at Intake (cfs)	679.7
PWS RMI	10.66	Distance from Outfall (mi)	12

Changes Since Last Permit Issuance: None

Other Comments: N/A

Treatment Facility Summary

Treatment Facility Name: White Deer Water Filtration Plant

The White Deer Water Filtration Plant treats source water from White Deer Creek and the Spruce Run Reservoir. Sludge from flocculator blowdown and wastewater from backwash cycles is discharged to a wastewater clarifier. Sludge is settled in the clarifier. Supernatant from the clarifier can be decanted back to the head of the drinking water treatment plant. In general, water from the clarifier is filtered through sand beds, collected in a storage tank and then pumped to the outfall (001). Settled sludge is placed in the drying beds. Filtrate from the drying beds is discharged into a storm drain that also conveys water to Outfall 001.

Additional wastewater is generated by pump station cooling water and drinking water analysis equipment that flows directly from a floor drain (Outfall 002) to the discharge point.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Physical (Industrial Waste)	Sedimentation	No Disinfection	0.001

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.001	N/A	Not Overloaded	Sludge Drying Beds	Hauled Off

Changes Since Last Permit Issuance: None

Other Comments: N/A

Compliance History

DMR Data for Outfall 001 (from March 1, 2019 to February 29, 2020)

Parameter	FEB 2020	JAN 2020	DEC 2019	NOV 2019	OCT 2019	SEP 2019	AUG 2019	JUL 2019	JUN 2019	MAY 2019	APR 2019	MAR 2019
Flow (MGD) Average Monthly	0.00145	0.00636	0.000396	0.00062	0.0014	0.00975	0.0124	0.00505	0.0078	0.0122	0.01091	0.002512
Flow (MGD) Daily Maximum	0.00246	0.0105	0.000586	0.00065	0.0021	0.0193	0.0140	0.00895	0.0110	0.0226	0.01460	0.003731
pH (S.U.) Minimum	6.8	6.9	7.1	6.9	6.5	7.0	6.5	6.7	6.7	6.8	6.9	7.1
pH (S.U.) Maximum	6.9	6.9	7.1	7.1	6.7	7.0	7.0	6.7	6.7	6.9	6.9	7.1
TRC (mg/L) Instantaneous Maximum	0.07	0.07	0.06	0.05	0.05	0.09	0.02	0.04	0.04	0.04	0.03	0.03
TSS (mg/L) Average Monthly	1.8	8.8	1.4	< 0.800	< 0.800	< 0.800	1.00	1.80	1.20	< 0.80	1.60	< 0.80
TSS (mg/L) Daily Maximum	1.8	8.8	1.4	< 0.800	< 0.800	< 0.800	1.00	1.80	1.20	< 0.80	1.60	< 0.80
Total Aluminum (mg/L) Average Monthly	< 0.100	< 0.100	< 0.100	0.100	< 0.100	< 0.100	< 0.100	< 0.10	< 0.01	< 0.100	< 0.100	< 0.100
Total Aluminum (mg/L) Daily Maximum	< 0.100	< 0.100	< 0.100	0.100	< 0.100	< 0.100	< 0.100	< 0.10	< 0.01	< 0.100	< 0.100	< 0.100
Total Iron (mg/L) Average Monthly	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.20	< 0.20	< 0.300	< 0.300
Total Iron (mg/L) Daily Maximum	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.20	< 0.20	< 0.300	< 0.300
Total Manganese (mg/L) Average Monthly	< 0.02	< 0.02	< 0.02	< 0.020	< 0.020	< 0.02	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Total Manganese (mg/L) Daily Maximum	< 0.02	< 0.02	< 0.02	< 0.02	< 0.020	< 0.02	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02

DMR Data for Outfall 002 (from March 1, 2019 to February 29, 2020)

Parameter	FEB 2020	JAN 2020	DEC 2019	NOV 2019	OCT 2019	SEP 2019	AUG 2019	JUL 2019	JUN 2019	MAY 2019	APR 2019	MAR 2019
Flow (MGD) Average Monthly	-	-	0.001	-	-	-	-	-	0.001	-	-	-
Flow (MGD) Daily Maximum	-	-	0.001	-	-	-	-	-	0.001	-	-	-
pH (S.U.) Minimum	-	-	6.4	-	-	-	-	-	6.5	-	-	-
pH (S.U.) Maximum	-	-	6.4	-	-	-	-	-	7.3	-	-	-
TRC (mg/L) Instantaneous Maximum	-	-	1.94	-	-	-	-	-	1.63	-	-	-

Compliance History	
Summary of DMRs:	Throughout the past 12 months, no effluent violations have been noted.
Summary of Inspections:	The Department last conducted an inspection of this facility on October 24, 2019. No violations were noted during the inspection. Discharges were observed from both outfalls during the inspection.

Other Comments:

Below is a summary of open violations for the client (ID No. 87712). All violations noted are outside the NCRO Clean Water Program and are not related to the system for which this permit applies.

FACILITY	INSP PROGRAM	PROGRAM SPECIFIC ID	VIOLATION DATE	VIOLATION	INSP REGION
STEELTON WATER FILTRATION PLT	Storage Tanks	22-63836	12/11/2019	Failure to meet containment requirements	SCRO
STEELTON WATER FILTRATION PLT	Storage Tanks	22-63836	12/11/2019	Failure to meet containment requirements	SCRO
PAW BOGGS	Safe Drinking Water	4140101	10/31/2019	FAILURE TO CERTIFY COMPLETION OF AN UNITERRUPTED SYSTEM SERVICE PLAN	NCRO
PA AMERICAN WATER COMPANY SCRANTON WWTP	WPC NPDES	PA0026492	12/20/2019	NPDES - Violation of Part C permit condition(s)	NERO
PA AMER WATER POCONO COUNTRY PLACE WWTP	WPC NPDES	PA0060097	11/01/2019	CSL - Failure to comply with terms and conditions of a WQM permit	NERO
PA AMER WATER POCONO COUNTRY PLACE WWTP	WPC NPDES	PA0060097	12/23/2019	NPDES - Violation of Part C permit condition(s)	NERO
PA AMER WATER POCONO COUNTRY PLACE WWTP	WPC NPDES	PA0060097	12/23/2019	NPDES - Violation of effluent limits in Part A of permit	NERO
PA AMER WATER POCONO COUNTRY PLACE WWTP	WPC NPDES	PA0060097	12/23/2019	CSL - Failure to comply with terms and conditions of a WQM permit	NERO
PA AMER WATER POCONO COUNTRY PLACE WWTP	WPC NPDES	PA0060097	12/23/2019	NPDES - Illegal discharge to waters of the Commonwealth from a sanitary sewer overflow (SSO)	NERO

Existing Effluent Limitations

Outfall 001

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	2/month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/month	Grab
Total Residual Chlorine	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
Total Suspended Solids	XXX	XXX	XXX	30	60	75	1/month	Grab
Total Aluminum	XXX	XXX	XXX	4.0	8.0	10	1/month	Grab
Total Iron	XXX	XXX	XXX	2.0	4.0	5.0	1/month	Grab
Total Manganese	XXX	XXX	XXX	1.0	2.0	2.5	1/month	Grab

Outfall 002

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	1/6 months	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/6 months	Grab
Total Residual Chlorine	XXX	XXX	XXX	XXX	XXX	Report	1/6 months	Grab

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .001
Latitude 41º 4' 17.90" **Longitude** -76º 57' 40.70"
Wastewater Description: Water Treatment Effluent

Technology-Based Limitations

Guidance

The following technology-based limitations are recommended by *Technology-Based Control Requirements for Water Treatment Plant Wastes (362-2183-003, 10/1/97)* for wastewater from treatment of water treatment plant sludges and filter backwash.

Parameter	Limit (mg/l)	SBC
Total Suspended Solids	30	Monthly Avg
	60	Daily Max
Total Iron	2.0	Monthly Avg
	4.0	Daily Max
Total Aluminum	4.0	Monthly Avg
	8.0	Daily Max
Total Manganese	1.0	Monthly Avg
	2.0	Daily Max
pH*	6.0	Minimum
	9.0	IMAX
Total Residual Chlorine	0.5	Monthly Avg
	N/A	Daily Max

*Also required by 25 Pa. Code 95.2(1)

Comments: These recommended effluent limitations are all currently established in the permit with the exception of total residual chlorine.

Water Quality-Based Limitations

Total Residual Chlorine (TRC)

In accordance with 25 PA Code Ch. 92a.48(3), chlorinated discharges shall be eliminated to waters classified as Exceptional Value (EV) or High Quality (HQ). Being that both outfalls from this facility discharge to White Deer Creek which is classified as a High Quality stream, this permit will establish a non-detect (<0.02 mg/L) effluent limit for TRC at both outfalls. 0.02 mg/L is recognized as the method detection limit (MDL) for TRC.

Because there had not been an effluent limit established for TRC in previous NPDES permits and the DMRs show that the facility would not be able to meet the proposed limit without modification, a compliance schedule will be established to provide the permittee an opportunity to make necessary facility/operation changes to meet the proposed limit.

There has been no change to the discharge or to the receiving watershed. Therefore, there is no need to reexamine the necessity of other water quality-based effluent limitations.

Best Professional Judgment (BPJ) Limitations

N/A

Chesapeake Bay

The discharge does not produce a net increase in total nitrogen or total phosphorus loadings. Consequently, no nutrient monitoring requirements are proposed.

Anti-Backsliding

In accordance with 40 CFR 122.44(l)(1) and (2), this permit does not contain effluent limitations, standards, or conditions that are less stringent than the previous permit.

Outfall No.	002	**Design Flow (MGD)**	0.001
Latitude	41° 4' 18.00"	**Longitude**	76° 57' 41.50"

Wastewater Description: Water Treatment Plant Wastewater

Technology-Based Limitations

The existing permit establishes effluent limits for pH (6.0 to 9.0) for outfall 001. These limits are in direct conformance with requirements outlined in 25 Pa. Code 95.2(1) relating to industrial waste discharges.

Water Quality-Based Limitations

Total Residual Chlorine (TRC)

In accordance with 25 PA Code Ch. 92a.48(3), chlorinated discharges shall be eliminated to waters classified as Exceptional Value (EV) or High Quality (HQ). Being that both outfalls from this facility discharge to White Deer Creek which is classified as a High Quality stream, this permit will establish a non-detect (<0.02 mg/L) effluent limit for TRC at both outfalls. 0.02 mg/L is recognized as the method detection limit (MDL) for TRC.

Because there had not been an effluent limit established for TRC in previous NPDES permits and the DMRs show that the facility would not be able to meet the proposed limit without modification, a compliance schedule will be established to provide the permittee an opportunity to make necessary facility/operation changes to meet the proposed limit.

There has been no change to the discharge or to the receiving watershed. Therefore, there is no need to reexamine the necessity of water quality-based effluent limitations.

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 Two Years After Permit Issuance.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Quarterly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report Avg Mo	Report Daily Max	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
TRC	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
TSS	XXX	XXX	XXX	30.0	60.0	75	1/month	Grab
Total Aluminum	XXX	XXX	XXX	4.0	8.0	10	1/month	Grab
Total Iron	XXX	XXX	XXX	2.0	4.0	5	1/month	Grab
Total Manganese	XXX	XXX	XXX	1.0	2.0	2.5	1/month	Grab

Compliance Sampling Location: Outfall 001

Outfall 001, Effective Period: Two Years After Permit Issuance through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Quarterly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report Avg Mo	Report Daily Max	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab

Outfall 001, Continued (from Two Years After Permit Issuance through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Quarterly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
TRC	XXX	XXX	XXX	0.02	XXX	XXX	1/month	Grab
TSS	XXX	XXX	XXX	30.0	60.0	75	1/month	Grab
Total Aluminum	XXX	XXX	XXX	4.0	8.0	10	1/month	Grab
Total Iron	XXX	XXX	XXX	2.0	4.0	5.0	1/month	Grab
Total Manganese	XXX	XXX	XXX	1.0	2.0	2.5	1/month	Grab

Compliance Sampling Location: Outfall 001

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 002, Effective Period: Permit Effective Date through Two Years After Permit Issuance.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Quarterly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report Avg Mo	Report Daily Max	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
TRC	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab

Compliance Sampling Location: Outfall 002

Outfall 002, Effective Period: Two Years After Permit Issuance through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Quarterly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report Avg Mo	Report Daily Max	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
TRC	XXX	XXX	XXX	0.02	XXX	XXX	1/month	Grab

Compliance Sampling Location: Outfall 002