pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0058467**
Facility Type	**Industrial**	APS ID	**1041601**
Major / Minor	**Minor**	Authorization ID	**1359043**

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

Applicant and Facility Information

Applicant Name	**The American College**	Facility Name	**The American College 630 Allendale Rd**
Applicant Address	630 Allendale Road	Facility Address	630 Allendale Road
	King Of Prussia, PA 19406-1695		King Of Prussia, PA 19406
Applicant Contact	Stephen Kernaghan	Facility Contact	Stephen Kernaghan
Applicant Phone	(610) 457-4243	Facility Phone	(610) 457-4243
Client ID	279192	Site ID	553737
SIC Code	4952	Municipality	Upper Merion Township
SIC Description	Trans. & Utilities - Sewerage Systems	County	Montgomery
Date Application Received	June 21, 2021	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Permit Renewal.

Summary of Review

The permittee has applied for renewal to their NPDES permit to discharge industrial wastewater to an unnamed tributary to Trout Creek through Outfall 001.

This permit is for the discharge of cooling tower blowdown water from a commercial office building HVAC.

Based on the email sent on August 2021 facility was trying to remove usage of inhibitors that was used in the AC units.

According to Operations Section reply, the site had decided to continue usage of the chemicals. Description and usage rates are specified below:

Chemical additive name	Purpose	Proposed usage Frequency	Proposed usage Rate	Units
PCT 3026	Cooling tower Microbiocide	2-3 times a week	0.6	lb/dose
PCT 6450	Cooling tower corrosion and scale inhibitor	Constant	2.6	lb/day

No other changes are in the quality and quantity of the discharge.

Therefore, all previously approved effluent limits and monitoring requirements are proposed in the draft permit (see page 4 of this factsheet).

Approve	Deny	Signatures	Date
X		Begay Omuralieva Begay Omuralieva / Environmental Engineering Specialist	June 14, 2022
X		Pravin Patel Pravin C. Patel, P.E. / Environmental Engineer Manager	06/21/2022

Summary of Review

Below is basis of the initial establishment of effluent limits determination:

pH

In accordance with 25 Pa Code 95.2 – Industrial wastes shall have a pH of not less than 6 and not greater than 9. Under this subchapter, exceptions may be made for streams impacted with acid mine drainage. In accordance with 25 Pa Code 93.7 – Specific water quality criteria for pH shall be from 6.0 to 9.0 inclusive.

Temperature

In accordance with DRBC Interpretive Guideline No. 1 Section B(1)a – Maximum temperature is 110° F where readily accessible to human contact.

Total Dissolved Solids

The original permit included the DRBC limit which was not achievable. Based on a discharge of 0.0018-mgd (0.0028-cfs) and a Q7-10 stream flow of 0.30-cfs, a discharge of 2,000 ppm TDS would increase the in-stream concentration of TDS by only 9%. This is within the DRBC standard of a maximum 33% in-stream increase in TDS. Therefore, the numerical limit was removed in the last permit and the permittee is only required to report the TDS concentration.

Act 14 Notification:

Upper Merion Township was notified on February 18, 2022
Montgomery County Commissioner was notified on February 18, 2022

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)	.0018
Latitude	40º 5' 58.32"	Longitude	-75º 24' 13.69"
Quad Name		Quad Code	
Wastewater Description:	Cooling Water		
Receiving Waters	Unnamed Tributary to Trout Creek	Stream Code	00982
NHD Com ID	26003258	RMI	0.2
Drainage Area	1.2	Yield (cfs/mi^2)	0.26
Q_{7-10} Flow (cfs)	0.31	Q_{7-10} Basis	See comments
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-F	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Siltation, Water/Flow Variability		
Source(s) of Impairment	Habitat Modification, Urban Runoff/Storm Sewers		
TMDL Status	Final	Name	Trout Creek

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)	

Comments: Low-flow yield based on USGS 01475300 Darby Creek near Devon, PA.

The nearest downstream public water supply intake for Pennsylvania American Water Company-Norristown District is located on the Schuylkill River. This discharge is not expected to impact the water supply.

Compliance History

DMR Data for Outfall 001 (from May 1, 2021 to April 30, 2022)

Parameter	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21	JUL-21	JUN-21	MAY-21
Flow (GPD) Average Monthly							3965	4493	5253	5503	367	379
Flow (GPD) Daily Maximum							3965	4493	5253	5503	367	379
pH (S.U.) Instantaneous Minimum							7.6	7.5	7.6	7.8	7.6	7.5
pH (S.U.) Instantaneous Maximum							7.9	8.4	8.6	8.6	8.5	8.2
Temperature (ºF) Instantaneous Maximum							84	85	86	88	86	84
Total Dissolved Solids (mg/L) Average Monthly							1410	954	912	1372	1260	1220
Total Dissolved Solids (mg/L) Instantaneous Maximum							1452	972	987	1530	1460	1390

Comment: AC unit is working at warm weather period, therefore the data provided accordingly

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 (GPD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Temperature (deg F) (ºF)	XXX	XXX	XXX	XXX	XXX	110	1/month	Grab
Total Dissolved Solids	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab

Compliance Sampling Location: Outfall 001