pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0276227**
Facility Type	**Municipal**	APS ID	**998238**
Major / Minor	**Minor**	Authorization ID	**1281852**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Hegins Hubley Authority**	Facility Name	**Hegins Hubley Authority WWTP**
Applicant Address	915 West Maple Street	Facility Address	Fearnot Road & Mill Road
	Valley View, PA 17983-0144		Sacramento, PA 17968
Applicant Contact	Demetrius Kasmari	Facility Contact	Demetrius Kasmari
Applicant Phone	(570) 682-3228	Facility Phone	(570) 682-3228
Client ID	220482	Site ID	452
Ch 94 Load Status	N/A (new permit)	Municipality	Hubley Township
Connection Status	N/A (new permit)	County	Schuylkill
Date Application Received	June 27, 2019	EPA Waived?	Yes
Date Application Accepted	July 23, 2019	If No, Reason	-

Purpose of Application: New NPDES permit.

Summary of Review

The applicant is requesting a new NPDES permit to discharge 0.6 MGD of treated sewage to Deep Creek, a CWF/MF designated receiving stream in state water plan basin 06-C (Mahantango – Wiconisco Creeks). As 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.

This facility will be considered a significant Chesapeake Bay discharger (flow greater than 0.4 MGD) as per the latest Watershed Implementation Plan (WIP). Cap loads for Total Nitrogen (TN) and Total Phosphorus (TP) are equal to "0", which means the permittee will need to utilize offsets and/or nutrient trading to achieve compliance with the Chesapeake Bay TMDL. As required by the DEP's Phase 2 Watershed Implementation Plan Wastewater Supplement, a minimum monitoring frequency of 2/week is included in the permit for TN and TP. To calculate TN, 2/week monitoring/reporting requirements are included in the permit for Total Kjeldahl Nitrogen and Nitrate+Nitrite-Nitrogen.

A Total Maximum Daily Load (TMDL) for the Pine Creek Watershed was prepared by PA DEP on November 10, 2008. The TMDL addresses metals (Iron, Manganese, and Aluminum) and depressed pH associated with acid mine drainage (AMD). The TMDL load allocations apply to nonpoint sources of pollution; there are no Waste Load Allocations (WLAs). Quarterly monitoring requirements for Total Iron, Total Manganese, and Total Aluminum are added to the permit to monitor these pollutants of concern.

For modeling inputs, RMI values were obtained using the "PA Historic Streams" feature of eMapPA as well as the "measure" tool. Drainage areas were delineated using USGS's StreamStats Interactive Map and elevations were obtained using the elevation profile feature of StreamStats (see Watershed Information attachment).

USGS's StreamStats estimates the $Q_{7\text{-}10}$ at the discharge to be 3.84 cfs, which results in a low flow yield (LFY) of 0.12 cfs/mi^2. Since there are no nearby representative gages to obtain flow data from, the more conservative value between the

Approve	Deny	Signatures	Date
X		/s/ Brian Burden, E.I.T. / Project Manager	August 8, 2019
X		/s/ Amy M. Bellanca, P.E. / Environmental Engineer Manager	August 8, 2019

Summary of Review

USGS StreamStats LFY and the default LFY of 0.1 cfs/mi^2 was chosen to model this discharge. Partial mixing factors were obtained using PENTOX for TRC modeling.

Limitations for pH, $CBOD_5$, TSS and Fecal Coliform are technology-based. The 10.0 mg/L Ammonia-Nitrogen summertime monthly average limitation is water quality-based (see WQM Modeling attachment). Monitoring and reporting is included in the wintertime months for Ammonia-Nitrogen. The TRC limitations are water quality-based (see TRC Calculation attachment) and are to be sampled for "daily when discharging" since the facility will utilize ultraviolet light for disinfection.

Weekly influent monitoring for $CBOD_5$ and TSS are added to the permit to determine if the removal percentages meet secondary treatment standards.

The monitoring frequencies for all parameters with effluent limitations conform with the monitoring frequencies recommended in Table 6-3 of the Department's Technical Guidance for the Development and Specification of Effluent Limitations (doc. no. 362-0400-001). The methods of expressing effluent limitations are in accordance with 362-0400-001 as well.

There are no open violations for this client that would warrant withholding the issuance of this permit.

WQM Modeling.pdf PENTOX.pdf TRC Calculation.pdf Watershed Information.pdf

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)	0.6
Latitude	40º 38' 18"	Longitude	-76º 36' 10"
Quad Name	Valley View	Quad Code	1333
Wastewater Description:	Sewage Effluent		

Receiving Waters	Deep Creek (CWF, MF)	Stream Code	17236
NHD Com ID	54970359	RMI	1.44
Drainage Area	31.3	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	3.13	Q_{7-10} Basis	Default LFY
Elevation (ft)	596	Slope (ft/ft)	0.0022
Watershed No.	6-C	Chapter 93 Class.	CWF, 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	Pine Creek - Schuylkill County

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

Nearest Downstream Public Water Supply Intake	United Water Pennsylvania		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	2360
PWS RMI	61.3	Distance from Outfall (mi)	~55

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.6
Latitude 40º 38' 18" **Longitude** -76º 36' 10"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25.0	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40.0	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
	50.0	IMAX	-	-
Total Suspended Solids	30.0	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45.0	Average Weekly	133.102(b)(2)	92a.47(a)(2)
	60.0	IMAX	-	-
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
	10,000 / 100 ml	IMAX	-	92a.47(a)(5)

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Total Residual Chlorine	0.35	Average Monthly	2019 TRC Calculation Spreadsheet
	1.16	IMAX	
Ammonia-Nitrogen (5/1 – 10/31)	10.0	Average Monthly	2019 WQM 7.0 Modeling
	20.0	IMAX	
Net Total Phosphorus (lbs)	0	Total Annual	Chesapeake Bay TMDL
Net Total Nitrogen (lbs)	0	Total Annual	