pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0031267**
Facility Type	**Non-Municipal**	APS ID	**825861**
Major / Minor	**Minor**	Authorization ID	**1264224**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Tri-Valley School District**	Facility Name	**Hegins-Hubley Elementary School**
Applicant Address	110 West Main Street Valley View, PA 17983-9423	Facility Address	1801 West Main Street Valley View, PA 17983
Applicant Contact	Mark D. Snyder, Superintendent	Facility Contact	Timothy J. Specht, Maintenance Supervisor
Applicant Phone	(570) 682-9013	Facility Phone	(570) 682-3125
Client ID	34157	Site ID	456649
Ch 94 Load Status	Not Overloaded	Municipality	Hegins Township
Connection Status	-	County	Schuylkill
Date Application Received	March 4, 2019	EPA Waived?	Yes
Date Application Accepted	March 7, 2019	If No, Reason	-
Purpose of Application	Renewal of Individual Sewage NPDES Permit.		

Summary of Review

The applicant is requesting the renewal of an NPDES permit to discharge up to 0.0022 MGD of treated sewage into Pine Creek, a Cold-Water Fishery, Migratory Fish (CWF, MF) receiving stream in State Water Plan Basin 6-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 stream segment is not designated as a naturally reproducing trout stream as per PA Fish & Boat Commission. This discharge is not expected to affect public water supplies.

Please note that actual site flows are greater than the permitted 0.0022 MGD. The table on page 4 and 5 of this fact sheet show the monthly average flows and daily maximum flow for this facility. The facility had an average monthly flow of 0.006243 MGD from October 2019 to June 2020. The application indicated that a new treatment plant is proposed for the Hegins/Tri-Valley Area. At that time, this plant would be shut down. The new treatment plant is currently in the financing phase; therefore, this permit can be renewed.

The previous permit used downstream USGS Gage #0155500 (East Mahantango Creek near Dalmatia, PA) to generate the LFY used in modeling. USGS StreamStats was used to generate the LFY and Q_{7-10} flow for this permit renewal. For modeling inputs, RMI values were obtained using the "PA Historic Streams" feature of eMapPA, drainage areas were delineated using USGS's StreamStats Interactive Map, and elevations were obtained using the elevation profile feature of StreamStats. A drainage area of 23.9 mi^2, a Q_{7-10} Flow of 4.01 cfs, and a LFY of 0.168 were used for WQM 7.0 modeling at Outfall 001 on Pine Creek.

WQM Modeling and TRC Calculations were also run using the maximum daily flow from the previous year of eDMR data (0.0509 MGD) and the state-wide default LFY of 0.1. Stricter water-quality based limitations were not recommended using any of these inputs.

Approve	Deny	Signatures	Date
X		/s/ Allison Seyfried / Environmental Engineering Specialist	August 25, 2020
X		/s/ Amy M. Bellanca, P.E. / Environmental Engineer Manager	9-10-20

Summary of Review

Limitations for pH, $CBOD_5$, Total Suspended Solids (TSS), and Fecal Coliform are technology-based and carried over from the previous permit. A BPJ-based limitation of 5.0 mg/L minimum for Dissolved Oxygen (DO) has been added to the permit and will come into effect three (3) years after the permit effective date. DO reporting is still required until the limit comes into effect.

2/month BPJ-based summertime limitations for Ammonia-Nitrogen has been added to the permit. Wintertime reporting will remain. eDMR data confirms the facility can meet these new limitations; therefore, limitations will be in effect at the permit effective date. WQM Modeling did not recommended stricter limitations.

The 1.2 mg/L monthly average and 2.8 mg/L IMAX limitations for Total Residual Chlorine (TRC) in the previously issued permit were technology-based limitations. As per PA Code 92a.47(a)(8) (which refers to PA Code 92a.48(b)(2)), a monthly average TRC facility-specific BAT effluent limit of 0.5 mg/L and an IMAX limit of 1.6 mg/L has been applied to this permit renewal. The TRC Calculation Spreadsheet did not recommend more stringent water quality-based limitations. eDMR data from the past year confirms the facility is already meeting these new limits (for all months except March 2019). Limits will be in effect at permit effective date.

A Total Maximum Daily Load (TMDL) for the Pine Creek Watershed was prepared for PA DEP on November 10, 2008. The TMDL addresses metals (Iron, Manganese, and Aluminum) and depressed pH associated with acid mine drainage (AMD) and siltation fur to agriculture sources. There are no Waste Load Allocations (WLAs) for this facility and the facility is not expected to be a significant source of AMD metals or siltation. Annual monitoring requirements for Total Iron, Total Manganese, and Total Aluminum are maintained in the permit to monitor these pollutants of concern.

The annual monitoring and reporting for Total Nitrogen, Total Phosphorous, Total Kjeldahl Nitrogen, and Nitrate-Nitrite as N has been maintained in this permit.

Monitoring frequencies for all parameters with limitations have been updated to the recommended frequencies found in Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations (Document No. 362-0400-001).

The Part C.I.F. existing site-specific condition has been carried over from the previous permit.

As per a previous NPDES Compliance Inspection Report, sludge is hauled by T.E. Bressler as needed.

The existing permit expired on August 31, 2019 and the application for renewal was received on time.

A Water Management System Inspection query indicated that on May 25, 2016 a Compliance Evaluation was performed.

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


Watershed Info - Hegins-Hubley.pdf


TRC Calc - 0.0022 MGD.pdf


TRC Calc - 0.0509 MGD 0.1 LFY.pdf


WQM 7.0 - 0.1 and 0.05090.pdf


WQM 7.0 - 0.0022.pdf


WQM 7.0 - 0.05090.pdf


Pine Creek TMDL.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)	0.0022
Latitude	40º 38' 15.87"	Longitude	-76º 33' 46.54"
Quad Name	Valley View	Quad Code	1333
Wastewater Description:	Sewage Effluent		
Receiving Waters	Pine Creek (CWF, MF)	Stream Code	17208
NHD Com ID	54970657	RMI	13.2000
Drainage Area	23.9 mi^2	Yield (cfs/mi^2)	0.168
Q_{7-10} Flow (cfs)	4.01	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	662.50	Slope (ft/ft)	-
Watershed No.	6-C	Chapter 93 Class.	CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, SILTATION		
Source(s) of Impairment	ACID MINE DRAINAGE, AGRICULTURE,		
TMDL Status	Final	Name	Pine Creek - Schuylkill County
Nearest Downstream Public Water Supply Intake	Duncannon Municipal Authority Water System		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	~ 49

Treatment Facility Summary

Treatment Facility Name: Hegins-Hubley Elementary School

WQM Permit No.	Issuance Date
5470406 T-1	8/16/1984
5470406	2/16/1971

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Primary Clarification & Sand Filters	Sodium hypochlorite (liquid)	0.006065 (2016-2018)

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0022	Unknown	Not Overloaded	-	Hauled

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	0.00312	0.01163	0.01297	0.00205	0.00757	0.00805	0.00086	0.00989	0.00005			0.00500
Flow (MGD) Daily Maximum	0.01200	0.04602	0.05090	0.00392	0.02705	0.03688	0.00279	0.03388	0.00018			0.01800
pH (S.U.) Minimum	6.70	6.53	6.59	6.67	6.54	6.58	6.70	6.82	7.14			6.80
pH (S.U.) Maximum	6.87	6.71	6.73	6.72	6.67	6.82	6.85	7.06	7.15			6.80
DO (mg/L) Minimum	6.07	7.40	7.30	6.11	5.59	4.69	4.12	3.20	4.32			5.64
TRC (mg/L) Average Monthly	0.05	0.45	0.10	1.28	0.19	0.25	0.08	0.25	0.11			0.03
TRC (mg/L) Instantaneous Maximum	0.06	0.65	0.20	1.96	0.31	0.53	0.14	0.62	0.11			0.03
CBOD5 (mg/L) Average Monthly	< 2.0	< 2.0	< 2	< 2.0	< 2.0	9.0	< 2.0	< 2.0	< 2.0			< 2.0
TSS (mg/L) Average Monthly	4	1	1	1	1	1	< 1	4	3			< 1
Fecal Coliform (CFU/100 ml) Geometric Mean	80	< 1	< 1	< 1	< 1	< 1	< 1	10	< 1			140
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	80	< 1	< 1	< 1	< 1	< 1	< 1	10	< 1			140
Nitrate-Nitrite (mg/L) Average Monthly							10.6					
Total Nitrogen (mg/L) Average Monthly							11.93					
Ammonia (mg/L) Average Monthly	< 0.10			< 0.10			1.24			< 0.10		
TKN (mg/L) Average Monthly							1.33					
Total Phosphorus (mg/L) Average Monthly							0.92					

Total Aluminum (mg/L) Average Monthly							0.07					
Total Iron (mg/L) Average Monthly							0.12					
Total Manganese (mg/L) Average Monthly							0.045					

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0022
Latitude 40º 38' 18.00" **Longitude** -76º 33' 47.00"
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)
	50.0	IMAX	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30.0	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	60.0	IMAX	133.102(b)(2)	92a.47(a)(2)
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)
Fecal Coliform (5/1 – 9/30)	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)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)
	1.6	IMAX		
Dissolved Oxygen	5.0	Minimum	-	BPJ
Ammonia-Nitrogen May 1 - Oct 31	25.0	Average Monthly	-	
	50.0	IMAX		
Ammonia-Nitrogen Nov 1 - Apr 30	Report	Average Monthly		

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Nitrate-Nitrite as N	Report	Annual Average	Previous Permit
Total Nitrogen			
Total Kjeldahl Nitrogen			
Total Phosphorus			
Aluminum, Total			Pine Creek Schuylkill County TMDL
Iron, Total			
Manganese, Total			

Anti-Backsliding

No limitations were made less stringent.