pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0060321**
Facility Type	**Non-Municipal**	APS ID	**626879**
Major / Minor	**Minor**	Authorization ID	**1306874**

Applicant and Facility Information

Applicant Name	**Village of Mountain Heights, Inc.**	Facility Name	**Village of Mountain Heights WWTP**
Applicant Address	139 Gardeners Lane	Facility Address	Village Lane
	Dalton, PA 18414-7839		Dalton, PA 18414-7839
Applicant Contact	David Mayer, Owner	Facility Contact	Mike Franko
Applicant Phone	(570) 575-3172	Facility Phone	(570) 878-3674
Client ID	259356	Site ID	250680
Ch 94 Load Status	Not Overloaded	Municipality	Overfield Township
Connection Status	-	County	Wyoming
Date Application Received	September 3, 2019	EPA Waived?	Yes
Date Application Accepted	January 28, 2021	If No, Reason	

Purpose of Application: Renewal of existing NPDES permit for discharge of treated sewage.

Summary of Review

The applicant is requesting the renewal of an NPDES permit to discharge up to 0.020 MGD of treated sewage into the Unnamed Tributary 28808 of South Branch Tunkhannock Creek, a Cold-Water Fishery, Migratory Fish (CWF, MF) receiving stream in State Water Plan Basin 4-F (Tunkhannock Creek). 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.

Limitations for pH, Total Suspended Solids (TSS), and Fecal Coliform are technology-based and carried over from the previous permit.

Limitations for $CBOD_5$, Ammonia-Nitrogen, Total Residual Chlorine (TRC), and Dissolved Oxygen (DO) are water quality-based and carried over from the previous permit. WQM 7.0 modeling and the TRC Calculation Spreadsheet did not recommend stricter limits.

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).

There are no representative stream gages in the vicinity of the outfall. The drainage area at Outfall 001 from USGS StreamStats is outside of the suggested range for the site and indicates that estimates were extrapolated with unknown errors. Therefore, the default Low Flow Yield (LFY) of 0.1 cfs/mi^2 was used to model the discharge. For modeling inputs,

Approve	Deny	Signatures	Date
X		/s/ Allison Seyfried / Environmental Engineering Specialist	February 10, 2021
X		/s/ Amy M. Bellanca, P.E. / Environmental Engineer Manager	3-19-21

DRAFT

Summary of Review

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.

Sludge use and disposal description and location(s): As per the permittee's Sludge and Biosolids Supplemental Report forms, liquid sludge is frequently hauled by Rural to various locations including:

- The March 2018 reporting form indicated sludge was hauled to WVSA and that seed sludge was hauled to St. Gabriel's
- The May 2018 reporting form indicates seed sludge was hauled to Northeast American Diocese
- The March 2019 reporting form indicates seed sludge was hauled to Lackawanna Trail
- The April 2019 reporting form indicates seed sludge was hauled to Freeman's Trailer Park

Starting with the May 2019 reporting form the permittee indicates that sludge is still being hauled by Rural, however the location is no longer specified on any of the reporting forms.

The existing permit expired on April 30, 2018 and the application for renewal was received late on September 3, 2019.

A Water Management System Inspection query indicated that on June 27, 2017 a Compliance Evaluation was performed.

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

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)	0.02
Latitude	41º 32' 8.50"	Longitude	-75º 48' 2.89"
Quad Name	Factoryville	Quad Code	0639
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to South Branch Tunkhannock Creek (CWF, MF)	Stream Code	28808
NHD Com ID	66406253	RMI	0.75
Drainage Area	0.14 mi^2	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	0.014	Q_{7-10} Basis	State-wide default
Elevation (ft)	1,126.50	Slope (ft/ft)	-
Watershed No.	4-F	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	-	Name	-
Nearest Downstream Public Water Supply Intake	Danville Borough Water Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	-
PWS RMI	122.58	Distance from Outfall (mi)	~ 90.3

Treatment Facility Summary

Treatment Facility Name: Village of Mountain Heights WWTP

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Aeration	Chlorination	0.00473

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.020	-	Not Overloaded	Holding Tank	Hauled

Modeling Results:

At Outfall 001 on Unnamed Tributary 28808 of South Branch Tunkhannock Creek:

RMI	Elevation (ft)	Drainage Area (mi^2)	Q_{7-10} Flow (cfs)
0.75	1,126.5	0.14	0.000811

$$Low\ Flow\ Yield\ using\ StreamStats = \frac{0.000811\ ft^3/sec}{0.14\ mi^2} = 0.0058\ \frac{ft^3/sec}{mi^2}$$

StreamStats Report

Region ID:	PA
Workspace ID:	PA20210209153741878000
Clicked Point (Latitude, Longitude):	41.53747, -75.80030
Time:	2021-02-09 10:38:02 -0500

Low-Flow Statistics Parameters[Low Flow Region 5]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.14	square miles	4.84	982
PRECIP	Mean Annual Precipitation	37	inches	33.1	47.1
GLACIATED	Percent of Glaciation	100	percent	0	100
FOREST	Percent Forest	89.1231	percent	41	100

Low-Flow Statistics Disclaimers[Low Flow Region 5]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

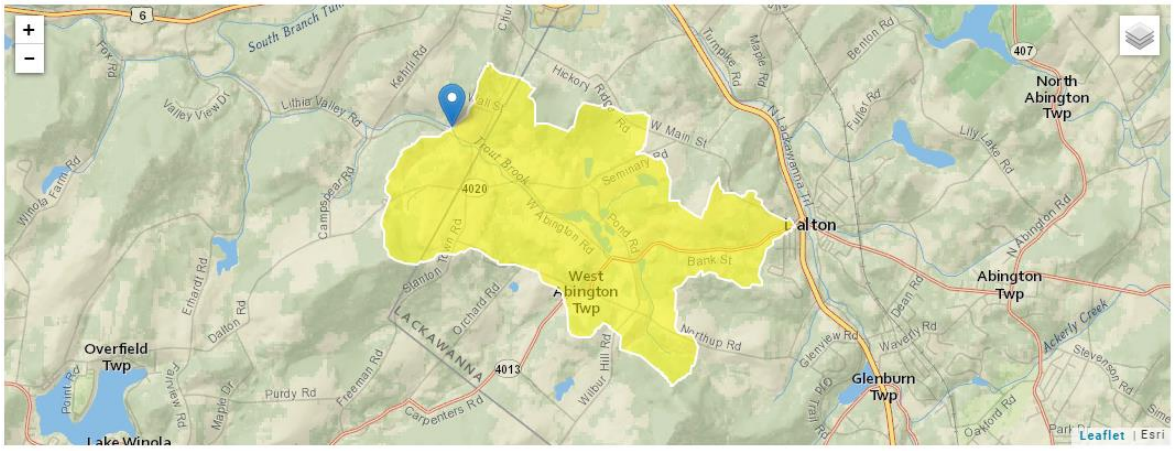
Statistic	Value	Unit
7 Day 2 Year Low Flow	0.00405	ft^3/s
30 Day 2 Year Low Flow	0.00677	ft^3/s
7 Day 10 Year Low Flow	0.000811	ft^3/s

At confluence with Unnamed Tributary 28803 to South Branch Tunkhannock Creek:

RMI	Elevation (ft)	Drainage Area (mi²)
0.0 2.35 (on 28803)	890	3.88

StreamStats Report

Region ID: PA
Workspace ID: PA20210209160857615000
Clicked Point (Latitude, Longitude): 41.54588, -75.79259
Time: 2021-02-09 11:09:17 -0500



Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	3.88	square miles

Using State-wide Low-Flow Yield (LFY) of 0.1 cfs/mi²:

$$\frac{0.1\ ft^3/sec}{mi^2} \times 0.14\ mi^2 = \frac{\mathbf{0.014\ ft^3}}{\mathbf{sec}}$$

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
04F	28808	Trib 28808 of S Br Tunkhannock Cr

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
0.750	Vil Mtn Heights	PA0060321	0.020	CBOD5	25		
				NH3-N	2.48	4.96	
				Dissolved Oxygen			4

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.014	= Q stream (cfs)	0.5	= CV Daily
0.02	= 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 = 0.163	1.3.2.iii	WLA cfc = 0.152
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.061	5.1d	LTA_cfc = 0.088

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.075	AFC
		INST MAX LIMIT (mg/l) = 0.245	

WQM 7.0 - Village of Mountain Height

TRC_Calculation - Village of Mountain

Pollution Report.pdf

Watershed Info - Village of Mountain

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.020
Latitude 41º 32' 15.00" **Longitude** -75º 48' 3.00"
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
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)

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Dissolved Oxygen	6.0	Minimum	Previous Water Quality Management Pollution Report
$CBOD_5$	10.0	Average Monthly	
	20.0	IMAX	
Ammonia-Nitrogen Nov 1 - Apr 30	7.5	Average Monthly	
	15.0	IMAX	
Ammonia-Nitrogen May 1 - Oct 31	2.5	Average Monthly	
	5.0	IMAX	
Total Residual Chlorine	0.04	Average Monthly	Previous TRC Modeling
	0.09	IMAX	

Anti-Backsliding

No limitations were made less stringent.