

Application Type Renewal
 Facility Type Non-Municipal
 Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0034088
 APS ID 744998
 Authorization ID 1391257

Applicant and Facility Information

Applicant Name	<u>UMH of PA, Inc.</u>	Facility Name	<u>Oakwood Lake MHP</u>
Applicant Address	<u>150 Clay Street</u> <u>Morgantown, WV 26501</u>	Facility Address	<u>308 Gruver Lane</u> <u>Tunkhannock, PA 18657</u>
Applicant Contact	<u>Jeffrey Yorick</u>	Facility Contact	<u>Jeffrey Yorick</u>
Applicant Phone	<u>(304) 291-3380</u>	Facility Phone	<u>(304) 291-3380</u>
Client ID	<u>79530</u>	Site ID	<u>256619</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Tunkhannock Township</u>
Connection Status	<u>-</u>	County	<u>Wyoming</u>
Date Application Received	<u>April 5, 2022</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>April 5, 2022</u>	If No, Reason	<u>-</u>
Purpose of Application	<u>Renewal of NPDES permit.</u>		

Summary of Review

The applicant is requesting renewal of their NPDES permit to discharge up to 0.010 MGD of treated sewage to Swale Brook, a CWF/MF designated receiving stream in state water plan basin 04-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.

Limits for pH, CBOD₅, TSS, and Fecal Coliform are technology-based and carried over from the previous permit. TRC limitations are water quality-based. This renewal only includes the IMAX TRC limitation since the permittee now utilizes ultraviolet radiation for disinfection. TRC shall be sampled each day it's used for backup disinfection, cleaning, or other purposes (see Part C.I.E.).

WQM 7.0 modeling recommended slightly more stringent limitations for Ammonia-Nitrogen (5.4 mg/L vs. 5.5 mg/L monthly average) due to the updated Ammonia-N Chapter 93 criteria. The new limitations will come into effect one year after the permit effective date. Modeling performed during this permit renewal did not recommend more stringent limits for any other parameters. Modeling inputs were carried over from the previous renewal and were obtained using USGS StreamStats, USGS The National Map Viewer, and DEP's eMapPA (see Watershed Information attachment).

Monitoring frequencies for all pollutants with limitations are in accordance with Table 6-3 of the Department's Technical Guidance for the Development and Specification of Effluent Limitations (doc. no. 362-0400-001).

The facility is classified as a Phase 5 Non-Significant Chesapeake Bay discharger. 2/month monitoring and reporting requirements for Total Phosphorus and Total Nitrogen (TKN + NO₂+NO₃-N) were added to the previously issued permit to monitor nutrient loadings. For this renewal, the monitoring frequency is adjusted to 1/quarter for nutrient parameters.

As per DEP guidance, 1/year monitoring/reporting for E. Coli is included in this renewal.

Approve	Deny	Signatures	Date
X		<i>Brian Burden</i> Brian Burden, E.I.T. / Project Manager	August 26, 2022
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	9-12-22

Summary of Review

Average annual flow values reported on the previous permit application were as follows: 0.0130 MGD (2015), 0.0121 MGD (2014), 0.0131 MGD (2013). The previously issued permit (effective October 1, 2017) required the permittee to submit to DEP a High Flow Management Plan (HFMP) for review within 1 year of permit issuance and also required the permittee to submit their WWTP standard operating procedures (SOPs) within 90 days of permit issuance. Neither of those items were received during the previous permit term. This permit requires the HFMP and SOPs to be submitted within 30 days of the permit effective date. More recent annual average flow values at the treatment plant are as follows: 0.0118 MGD (2021), 0.0079 MGD (2020), 0.0118 MGD (2019), 0.0159 MGD (2018).

There are 3 open WPC NPDES violations for the permittee that may warrant withholding issuance of the final permit:

- Violation of effluent limits in Part A of permit (6/6/2022)
- Failure to submit monitoring report(s) or properly complete monitoring reports (6/6/2022)
- Failure to pay annual fee (6/7/2022 for Brookside MHP)

eDMR review of the previous two years revealed the following effluent limitation exceedances:

- May 2022 – Ammonia-N: 11.8 mg/L monthly average (limitation was 5.5 mg/L)
- April 2022 – Fecal Coliform: >2420 No./100mL IMAX (limitation was 10000 No./100mL)
- December 2021 – Total Suspended Solids: 31.5 mg/L average monthly (limitation was 30.0 mg/L)
- June 2021 – Total Suspended Solids: 35.5 mg/L average monthly (limitation was 30.0 mg/L)
- September 2020 – Fecal Coliform: 1253 No./100mL geometric mean (limitation was 200 No./100mL)
- September 2020 – Fecal Coliform: 1553 No./100mL IMAX (limitation was 1000 No./100mL)
- August 2020 – Fecal Coliform: 1365 No./100mL geometric mean (limitation was 200 No./100mL)
- August 2020 – Fecal Coliform: 2420 No./100mL IMAX (limitation was 1000 No./100mL)

EPA waiver is in effect.

Sludge use and disposal description and location(s): The permit renewal application indicates 1.4142 dry tons of sewage sludge / biosolids were hauled to the Greater Hazleton Joint Sewer Authority’s WWTP in the previous year via Environmental Service Corp.



WQM
Modeling.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.	<u>001</u>	Design Flow (MGD)	<u>0.01</u>
Latitude	<u>41° 33' 36"</u>	Longitude	<u>-75° 57' 29"</u>
Quad Name	<u>Tunkhannock</u>	Quad Code	<u>0638</u>
Wastewater Description: <u>Sewage effluent</u>			
Receiving Waters	<u>Swale Brook</u>	Stream Code	<u>28785</u>
NHD Com ID	<u>66406473</u>	RMI	<u>2.9</u>
Drainage Area	<u>0.49 mi²</u>	Yield (cfs/mi ²)	<u>0.051</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.025</u>	Q ₇₋₁₀ Basis	<u>Gage 01534000</u>
Elevation (ft)	<u>1042</u>	Slope (ft/ft)	<u>0.073</u>
Watershed No.	<u>4-F</u>	Chapter 93 Class.	<u>CWF, MF</u>
Existing Use	<u>-</u>	Existing Use Qualifier	<u>-</u>
Exceptions to Use	<u>-</u>	Exceptions to Criteria	<u>-</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>-</u>		
Source(s) of Impairment	<u>-</u>		
TMDL Status	<u>-</u>	Name	<u>-</u>
Background/Ambient Data		Data Source	
pH (SU)	<u>-</u>		<u>-</u>
Temperature (°F)	<u>-</u>		<u>-</u>
Hardness (mg/L)	<u>-</u>		<u>-</u>
Other:	<u>-</u>		<u>-</u>
Nearest Downstream Public Water Supply Intake		<u>Danville Municipal Water Authority</u>	
PWS Waters	<u>Susquehanna River</u>	Flow at Intake (cfs)	<u>1123</u>
PWS RMI	<u>122.5</u>	Distance from Outfall (mi)	<u>~85</u>

Changes Since Last Permit Issuance: Issuance of WQM permit 6619401 for installation of UV disinfection system, installation of a precast concrete sludge holding tank, and installation of a new duplex submersible pump station for effluent.

Treatment Facility Summary				
Treatment Facility Name: Oakwood Lake MHP				
WQM Permit No.		Issuance Date		
6619401		7/1/2019		
6687401		1/26/1988		
6670402		10/27/1970		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	UV	0.0118 (2021)
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.01	20.8	Hydraulically Overloaded	Settled / Holding Tank	Hauled Off-Site

Changes Since Last Permit Issuance: Issuance of WQM permit 6619401 for installation of UV disinfection system, installation of a precast concrete sludge holding tank, and installation of a new duplex submersible pump station for effluent.

Development of Effluent Limitations

Outfall No. 001
Latitude 41° 33' 36"
Wastewater Description: Sewage Effluent

Design Flow (MGD) 0.01
Longitude -75° 57' 29"

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	-	-
Total Suspended Solids	30.0	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	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
Ammonia-Nitrogen* (5/1 – 10/31)	5.4	Average Monthly	2022 WQM Modeling
	10.9	IMAX	
Ammonia-Nitrogen* (11/1 – 4/30)	16.2	Average Monthly	
Total Residual Chlorine	0.80	IMAX	2016 TRC Calculation Spreadsheet

* The revised Ammonia-N limitations come into effect 1-year after the permit effective date.