pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0060984**
Facility Type	**Non-Municipal**	APS ID	**587872**
Major / Minor	**Minor**	Authorization ID	**1390359**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Outhouse Springs, LLC**	Facility Name	**Outhouse Springs**
Applicant Address	241 Brian Lane	Facility Address	241 Brian Lane
	Dalton, PA 18414		Dalton, PA 18414
Applicant Contact	Ben Schwimmer	Facility Contact	Ben Schwimmer
Applicant Phone	(917) 620-8566	Facility Phone	(917) 620-8566
Client ID	249456	Site ID	250890
Ch 94 Load Status	-	Municipality	Benton Township
Connection Status	-	County	Lackawanna
Date Application Received	March 29, 2022	EPA Waived?	Yes
Date Application Accepted	March 29, 2022	If No, Reason	-

Purpose of Application: Renewal of NPDES permit.

Summary of Review

The applicant is requesting renewal of an NPDES permit to discharge up to 0.095 MGD of treated sewage to Tributary 28852 to South Branch Tunkhannock Creek, a cold water and migratory fish designated receiving stream (CWF, MF) in State Water Plan watershed 04-F (Tunkhannock Creek). Per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than the designated use.

In previous renewals, the point of first aquatic use was located on South Branch Tunkhannock Creek at the confluence of Tributary 28851, approximately 1.1 miles downstream of the discharge. This previous point of first use determination was conducted in 1983 and the receiving stream was considered a dry stream discharge although no biological data was contained in the memo.

Another point of first use survey was conducted in November 2022 (attached). It was determined Tributary 28852 contains a modest but established macroinvertebrate community with multiple feeding groups and is indicative of long-term flow which supports an aquatic life use. The point of first use for this facility should be considered at the discharge location which is consistent with established guidance.

Data from stream gage 01533960 (South Branch Tunkhannock Creek near East Benton, PA) was used to model the discharge in previous modeling, resulting in a low flow yield (LFY) of 0.027 cfs/mi^2. There's no current data available for that gage or gage 01533950 (South Branch Tunkhannock Creek near Montdale, PA). Since no other nearby gages appear to be representative of the conditions at Outfall 001, it was decided to utilize the default LFY of 0.1 cfs/mi^2 to model the discharge. 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 attachments).

WQM 7.0 modeling recommended more stringent limitations for Ammonia-N (1.5 mg/L monthly average summertime). The new limitations will come into effect 3 years after the permit effective date and a compliance schedule is included in Part C with annual goals. The standard 3x multiplier was used to determine the wintertime limitations. eDMR data since 1/1/2020 shows the

Approve	Deny	Signatures	Date
X		*Brian Burden* Brian Burden, E.I.T. / Project Manager	March 20, 2023
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	4-26-23

Summary of Review

discharge met the more stringent limitations approximately 90% of the time. The average monthly discharge was below 0.7 mg/L approximately 84% of the time.

TRC limitations in the previously issued permit were old technology-based limitations (1.2 mg/L monthly average, 2.8 mg/L IMAX). 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 is applied to this permit renewal. These limitations will come into effect 1 year after the Permit Effective Date.

When modeling the discharge using the latest TRC calculation spreadsheet and the updated point of first use location, a monthly average limitation of 0.02 mg/L and an IMAX of 0.06 mg/L was recommended. These water quality-based limitations will come into effect 3 years after the permit effective date. The permittee may conduct site-specific studies to alter the new TRC limitations (see Part C.III). Several factors can change the recommended TRC limitations as calculated by the spreadsheet, such as: chlorine demand of stream, chlorine demand of discharge, and stream flow. Default values for chlorine demand were used to develop the limitations (0.3 mg/L for stream demand, 0 mg/L for discharge demand). The stream flow value was determined by multiplying the drainage area at Outfall 001 (delineated using USGS's StreamStats) by the default LFY of 0.1 cfs/mi^2. Part C.IV is added to the permit with requirements for when the water quality-based TRC limitations come into effect.

Fecal Coliform, pH, TSS, $CBOD_5$, and DO limitations are carried over from the previous permit. Annual monitoring/reporting requirements for Total Phosphorus and Total Nitrogen components (TKN + NO_2 + NO_3-N) are carried over from the previous renewal and are in accordance with the Phase 3 Watershed Implementation Plan Wastewater Supplement (revised 9/13/2021). Monitoring/reporting requirements for annual average Ammonia-N are removed from the permit and monitoring/reporting for annual average Total Nitrogen is added to the permit.

As per DEP guidance, quarterly monitoring/reporting is added to the permit for E.Coli. The minimum monitoring frequency for all parameters with limitations are consistent with Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (doc. No. 362-0400-001). The minimum monitoring frequency for DO, TRC and pH is updated from 1/week to 1/day.

There are no open WPC NPDES violations for the client that would warrant withholding issuance of the final permit. The previously issued permit expired on 6/30/2022 and the renewal application was not submitted in a timely manner.

Sludge use and disposal description and location(s): The permit application indicates 2.76 dry tons of sludge/biosolids were hauled to the Greater Hazleton Joint Sewer Authority WWTP via Environmental Service Corporation of PA during the previous year.


Outhouse Springs POFU.pdf


StreamStats Outfall 001.pdf


StreamStats Point 2.pdf


Elevations RMIs.pdf


WQM Modeling.pdf


TRC Calculation.pdf


1983 Pollution Report.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)	0.095
Latitude	41º 34' 27.63"	Longitude	-75º 43' 8.57"
Quad Name	Dalton	Quad Code	0640
Wastewater Description:	Sewage Effluent		
Receiving Waters	Tributary 28852 of South Branch Tunkhannock Creek (CWF, MF)	Stream Code	28852
NHD Com ID	66403875	RMI	0.77
Drainage Area	0.12 mi^2	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	0.012	Q_{7-10} Basis	Default LFY
Elevation (ft)	1,144	Slope (ft/ft)	0.047
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	-

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

Nearest Downstream Public Water Supply Intake	Danville Municipal Water Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1123
PWS RMI	122.5	Distance from Outfall (mi)	~98.5

Changes Since Last Permit Issuance: New point of first aquatic use. More stringent limitations for several parameters are included in the renewal.

Treatment Facility Summary

Treatment Facility Name: Outhouse Springs, LLC

WQM Permit No.	Issuance Date
3575410 T-1	6/28/2006

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Oxidation Ditch	Gas Chlorine	0.095

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

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.095
Latitude 41º 34' 27.63" **Longitude** -75º 43' 8.57"
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	-	-
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)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)
	1.6	IMAX	-	-

Comments: The technology-based TRC limitations will come into effect 1 year after the permit effective date.

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Ammonia-N (5/1 – 10/31)	1.5	Average Monthly	2023 WQM 7.0
	3.0	IMAX	
Ammonia-N (11/1 – 4/30)	4.5	Average Monthly	
	9.0	IMAX	
Total Residual Chlorine	0.02	Average Monthly	2023 TRC Calculation Spreadsheet
	0.06	IMAX	
Dissolved Oxygen	6.0	Minimum	Previous modeling.

Comments: The water quality-based TRC and Ammonia-N limitations will come into effect 3 years after the permit effective date.