

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

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0050989  
 APS ID 1060912  
 Authorization ID 1391894

**Applicant and Facility Information**

Applicant Name	<u>Frederick Mennonite Comm</u>	Facility Name	<u>Frederick Mennonite Comm</u>
Applicant Address	<u>P O Box 498</u> <u>Frederick, PA 19435-0498</u>	Facility Address	<u>2849 Big Road (Rt 73)</u> <u>Frederick, PA 19435</u>
Applicant Contact	<u>James Groff</u>	Facility Contact	<u>Jim Groff</u>
Applicant Phone	<u>(610) 754-7878</u>	Facility Phone	<u>(610) 754-7878</u>
Client ID	<u>27905</u>	Site ID	<u>240636</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Upper Frederick Township</u>
Connection Status		County	<u>Montgomery</u>
Date Application Received	<u>April 6, 2022</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted		If No, Reason	
Purpose of Application	<u>Permit Renewal</u>		

**Summary of Review**

The applicant requests a renewal of their NPDES permit to discharge 0.0499 MGD treated sewage from STP serving Frederick Mennonite Community in Upper Frederick Township, Montgomery County. The treated effluent is continued to discharge into an Unnamed tributary to Swamp Creek, which is classified as TSF, MF.

The STP consists of two extended aeration activated sludge treatment trains. The plant units are bar screen and grinder. 2 equalization tanks, 6- aeration tanks, final clarifier, two sludge holding tanks, two sand filters and UV disinfection system. Liquid sludge from the STP is hauled to Pottstown WWTP

UV monitoring is added to Part A and Part C of the permit.

There were no other changes to the facility, wastewater quantities, qualities and receiving stream designation since last permit renewal, therefore, previously established effluent limits and monitoring requirements will remain for this current renewal.

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.

Approve	Deny	Signatures	Date
x		<i>Vasantha</i> Vasantha Palakurti / Environmental Engineering Specialist	April 29, 2022
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	04/29/2022

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.0499</u>
Latitude	<u>40° 17' 54.34"</u>	Longitude	<u>-75° 31' 52.08"</u>
Quad Name	<u>Sassamansville</u>	Quad Code	<u>1641</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Swamp Creek (TSF, MF)</u>	Stream Code	<u>01318</u>
NHD Com ID	<u>25994258</u>	RMI	<u></u>
Drainage Area	<u></u>	Yield (cfs/mi <sup>2</sup> )	<u></u>
Q <sub>7-10</sub> Flow (cfs)	<u></u>	Q <sub>7-10</sub> Basis	<u></u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>3-E</u>	Chapter 93 Class.	<u>TSF, 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>		

Changes Since Last Permit Issuance: There were no changes to the facility since last permit renewal nor were any changes to the TMDL.

Compliance History	
<b>Summary of DMRs:</b>	None
<b>Summary of Inspections:</b>	The facility was cited during the 12/22/21 DEP inspection due to sand filter waste being deposited on the ground outside of the Permitted area, resulting in a 12/28/21 NOV.

Compliance History

DMR Data for Outfall 001 (from March 1, 2021 to February 28, 2022)

Parameter	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21
Flow (MGD) Average Monthly	0.0213	0.009	0.009	0.0146	0.0152	0.0216	0.021	0.017	0.0155	0.013	0.0208	0.0214
Flow (MGD) Daily Maximum	0.0397	0.0209	0.0205	0.0335	0.0321	0.0454	0.0403	0.0255	0.0312	0.0265	0.0364	0.0475
pH (S.U.) Instantaneous Minimum	7.6	7.6	7.7	7.6	7.6	7.0	7.4	7.5	7.7	7.2	7.7	7.7
pH (S.U.) Instantaneous Maximum	8.2	8.2	8.2	8.1	8.2	8.1	8.5	8.1	8.2	8.1	8.1	8.1
DO (mg/L) Minimum	9.6	9.6	8.7	9.2	7.7	6.8	7.0	6.1	6.0	7.6	8.1	8.9
CBOD5 (mg/L) Average Monthly	2.5	3.9	3	2	2	3.5	2.0	< 2	< 2	2.0	< 2	< 2
TSS (mg/L) Average Monthly	1.0	9	8	4	5.5	9	6.5	1.5	4	8.5	2.5	< 1
Fecal Coliform (CFU/100 ml) Geometric Mean	79.3	54.7	109.5	< 1	2.2	20.5	2	4	2.6	10.2	< 1	3.5
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	210	60	120	2	5	30	3	5	7	35	< 1	12
Ammonia (mg/L) Average Monthly	2.6	1.2	2.8	0.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.19	0.11	1.5
Total Phosphorus (mg/L) Average Monthly	0.2	0.3	0.24	0.2	0.2	0.41	0.7	0.9	0.5	0.28	0.3	0.45

**Development of Effluent Limitations**

Outfall No. 001 Design Flow (MGD) .0499  
 Latitude 40° 17' 52.00" Longitude -75° 32' 3.87"  
 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 <sub>5</sub>	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	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)

Comments: DRBC Fecal requirements during winter months are included in the permit (10% rule)

**Water Quality-Based Limitations**

No water quality model run since no change in wastewater quality, quantity and receiving stream designation.

Parameter	Limit (mg/l)	SBC	Model
CBOD <sub>5</sub> (5/1 to 10/31)	10	Average Monthly	Existing Limit
CBOD <sub>5</sub> (11/1 to 4/30)	15	Average Monthly	Existing Limit
Total Suspended Solids	15	Average Monthly	Existing Limit
NH <sub>3</sub> -N (5/1 to 10/31)	3.0	Average Monthly	Existing Limit
NH <sub>3</sub> -N (11/1 to 4/30)	4.5	Average Monthly	Existing Limit
Phosphorus as P	1.0	Average Monthly	Existing Limit

**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

**Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0	XXX	XXX	XXX	1/day	Grab
CBOD5 Nov 1 - Apr 30	XXX	XXX	XXX	15	XXX	30	2/month	24-Hr Composite
CBOD5 May 1 - Oct 31	XXX	XXX	XXX	10	XXX	20	2/month	24-Hr Composite
TSS	XXX	XXX	XXX	15	XXX	30	2/month	24-Hr Composite
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9	2/month	24-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6	2/month	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	1.0	XXX	2	2/month	24-Hr Composite
Ultraviolet light intensity (mW/cm <sup>2</sup> )	XXX	XXX	Report	XXX	XXX	XXX	1/day	Grab