pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0053384**
Facility Type	**Non-Municipal**	APS ID	**1032359**
Major / Minor	**Minor**	Authorization ID	**1343310**

Applicant and Facility Information

Applicant Name	**Buckingham Assembly Hall Of Jehovahs Witnesses**	Facility Name	**Jehovahs Witnesses STP**
Applicant Address	4414 New Hope Road	Facility Address	4414 New Hope Road
	Furlong, PA 18925-1306		Furlong, PA 18925-1306
Applicant Contact	John Iigenfritz	Facility Contact	Michael Usborne
Applicant Phone	(215) 260-1677	Facility Phone	(267) 446-1677
Client ID	65351	Site ID	458852
Ch 94 Load Status	Not Overloaded	Municipality	Buckingham Township
Connection Status		County	Bucks
Date Application Received	February 17, 2021	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Permit Renewal

Summary of Review

The applicant requests approval for renewal of a National Pollutant Discharge Elimination System (NPDES) permit to discharge ,8000 GPD of treated sewage from the sewage treatment plant serving Assembly Hall of Jehovah's Witness into an unnamed tributary of Mill Creek.

The STP consists of a septic tank, two-aerated equalization tank, pump tank, three sand filters, chlorinator/chlorine contact tank, and tablet de-chlorinator/aerated de-chlorinator tank

Based on the effluent data listed in the permit application, the discharge is in compliance with the existing and proposed limits.

The facility has a permitted flow of 8,000-gpd, based on peak weekend flows. A field inspection conducted in 1995 showed that the receiving stream was continuously flowing (Q7-10 = 0.007-cfs), not a dry swale. The effluent from the facility was modeled in 1995 using WQM 6.3, release 1.2. More stringent tiered limits for ammonia and dissolved oxygen were included in the permit issued in 1995. Since this is a small facility with no proposed changes in flow, the effluent limits have been carried over from previous permits.

Neshaminy Creek Watershed Total Maximum Daily Load (TMDL):
A TMDL for Neshaminy Creek Watershed was finalized on April 9, 2003 which was revised on December 2003. The Neshaminy Creek is located in state watershed 2-F, in Bucks and Montgomery Counties. It has approximately 418.3 miles of streams. Since 1996, 203.3 miles of these streams have been included on Pennsylvania's 303(d) list of streams having aquatic life use impairments. The watershed as a whole is very much a point source-dominated system. On an annual basis, the municipal wastewater treatment plants in the watershed contribute about 25% of the total phosphorus load. During critical low-flow periods, effluent discharges comprise over 90% of the total stream flow in many reaches. Upland erosion from

Approve	Deny	Signatures	Date
x		*Vasantha* Vasantha Palakurti / Environmental Engineering Specialist	March 9, 2021
X		*Pravin Patel* Pravin C. Patel, P.E. / Environmental Engineer Manager	03/10/2021

Summary of Review

developing areas and agriculture, and streambank erosion are other major sources of phosphorus, as well as sediment. However, in September 6, 2007, the nutrients portion of the TMDL was withdrawn by PADEP and approved by USEPA on January 31, 2008. No sediment WLA was assigned for this facility other than urban BMPs.

Effluent monitoring for both total phosphorus (TP) and total nitrogen (TN) will continue for this permit 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.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.008
Latitude	40Âº 17' 39.72"	Longitude	-75Âº 1' 30.64"
Quad Name	Buckingham	Quad Code	07-23-2
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary of Mill Creek	Stream Code	02612
NHD Com ID	25475600	RMI	0.3
Drainage Area	0.1	Yield (cfs/mi^2)	0.07
Q_{7-10} Flow (cfs)	0.007	Q_{7-10} Basis	1995 WQPR
Elevation (ft)		Slope (ft/ft)	
Watershed No.	2-F	Chapter 93 Class.	WWF, 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	Final (Withdrawn)	Name	Neshaminy Creek

Changes Since Last Permit Issuance: There were no changes to the facility since last renewal.

Compliance History

DMR Data for Outfall 001 (from February 1, 2020 to January 31, 2021)

Parameter	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20
Flow (GPD) Average Monthly	132	534	291	654	166	891		8	17	43	37	387
Flow (GPD) Daily Maximum	1576	5893	2981	8809	1702	26273		119	263	584	288	1101
pH (S.U.) Instantaneous Minimum	7.3	7.2	6.9	7.2	7.1	7.2		7.2	7.1	7.5	6.5	7.3
pH (S.U.) Instantaneous Maximum	7.5	7.8	7.6	7.7	7.7	7.4		7.2	7.2	7.5	7.0	7.8
DO (mg/L) Instantaneous Minimum	7.4	5.4	6.01	8.41	8.61	9.38		10.14	11.54	14.1	11.81	6.39
TRC (mg/L) Average Monthly	0.01	0.02	0.04	0.05	0.08	0.03		0.06	< 0.01	< 0.01	< 0.01	< 0.01
TRC (mg/L) Instantaneous Maximum	0.04	0.12	0.15	0.24	0.22	0.05		0.06	< 0.01	< 0.01	< 0.01	< 0.01
CBOD5 (mg/L) Average Monthly	3.2	< 0.01	< 0.01	< 0.01	2.1	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TSS (mg/L) Average Monthly	< 0.01	< 0.01	< 0.01	0.45	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fecal Coliform (CFU/100 ml) Geometric Mean	< 2.0	21	2.0	< 2.0	< 2	26		10	830	< 2	40	< 1
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	< 2.0	21	2.0	< 2.0	< 2	26		10	830	< 2	40	< 1
Total Nitrogen (mg/L) Average Monthly	< 6.2	< 6.9	< 11	< 11	< 8.6	7.3		0.39	12	< 10.4	< 10.6	< 9.20
Ammonia (mg/L) Average Monthly	< 0.01	< 0.01	0.11	< 0.01	< 0.01	< 0.01		0.10	0.10	< 0.01	< 0.01	< 0.01
Total Phosphorus (mg/L) Average Monthly	0.62	0.77	0.87	0.71	0.75	0.55		0.041	0.95	1.0	0.88	0.81

Compliance History

Effluent Violations for Outfall 001, from: March 1, 2020 To: January 31, 2021

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	05/31/20	Geo Mean	830	CFU/100 ml	200	CFU/100 ml

Summary of Inspections: The facility was inspected on 7/14/2020 and no violations were noted during the inspection.

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) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (GPD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.13	XXX	0.30	1/day	Grab
CBOD5 Nov 1 - Apr 30	XXX	XXX	XXX	20	XXX	40	1/month	24-Hr Composite
CBOD5 May 1 - Oct 31	XXX	XXX	XXX	10	XXX	20	1/month	24-Hr Composite
TSS	XXX	XXX	XXX	10	XXX	20	1/month	24-Hr Composite
Fecal Coliform (CFU/100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	6.0	XXX	12	1/month	24-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	2.0	XXX	4	1/month	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite