Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0060763**
Facility Type	**Municipal**	APS ID	**742356**
Major / Minor	**Minor**	Authorization ID	**1454858**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Middle Smithfield Township**	Facility Name	**Winona WWTP**
Applicant Address	147 Municipal Drive	Facility Address	1107 Scout Circle
	East Stroudsburg, PA 18302		East Stroudsburg, PA 18302
Applicant Contact	Joan Woison	Facility Contact	David Scholtz
Applicant Phone	(570) 223-8920	Facility Phone	(570) 629-2981
Client ID	44038	Site ID	624684
Ch 94 Load Status	Not Overloaded	Municipality	Middle Smithfield Township
Connection Status	No Limitations	County	Monroe
Date Application Received	August 16, 2023	EPA Waived?	Yes
Date Application Accepted	August 16, 2023	If No, Reason	-
Purpose of Application	Renewal of NPDES permit.		

Summary of Review

The applicant is requesting the renewal of an NPDES permit to discharge up to 0.050 MGD of treated sewage into Bush Kill Creek, a High Quality-Cold Water & Migratory Fish (HQ-CWF, MF) receiving stream in State Water Plan Basin 1-D (Shohola – Bushkill Creeks). 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 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 Dissolved Oxygen (DO), $CBOD_5$, Total Suspended Solids (TSS), Fecal Coliform, Ammonia-Nitrogen, Total Dissolved Solids (TDS), Phosphorus, Total Kjeldahl Nitrogen (TKN) and Nitrate as N are water quality-based per DRBC requirements and are carried over from the previous permit. Limitations for TRC and pH are technology-based and are carried over from the previous permit.

Water Quality Modeling does not recommend more stringent limitations (see attached). Stream gage 1439500 (Bush Kill at Shoemakers, PA) was used as a reference gage to develop the low flow yield (LFY) used to model the discharge. The $Q_{7\text{-}10}$ and drainage area at the gage were obtained from the USGS StreamStats interactive map. RMI values were obtained using the Department's eMapPA, drainage areas were delineated using StreamStats, and elevations were obtained using the elevation profile tool on StreamStats.

The latest DRBC Docket No. D-1973-209 CP-4 doesn't include any additional requirements to incorporate into the NPDES permit.

Monitoring/reporting requirements for Total Nitrogen and Nitrate-Nitrite as N are carried over in this renewal. As per current DEP guidance, quarterly monitoring/reporting requirements are included in the permit for E. Coli.

Approve	Deny	Signatures	Date
X		Brian Burden, E.I.T. / Project Manager	November 13, 2024
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	11-22-24

Summary of Review

Monitoring frequencies for all parameters with limitations are consistent with 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).

The following template Part C special condition for UV system monitoring is included in this renewal:

The permittee shall report operation of the ultraviolet (UV) disinfection system on a daily basis using the Daily Effluent Monitoring Form (3800-FM-BCW0435) and the parameter named "UV Functional" The permittee shall report values of "1" for Yes (i.e., the UV system is functional) and "< 1" for No (i.e., the UV system is not functional). The UV system shall be considered functional when all components that are necessary for disinfection to achieve effluent limitations in Part A of this permit are operating properly.

The existing permit expired on March 31, 2024 and the application for renewal was submitted on time. There are no open violations for this client that warrant withholding issuance of this permit.

Sludge use and disposal description and location(s): The permit renewal application indicates 2.502 dry tons of sludge was hauled to the Fernwood WWTP in the previous year.

WQM Modeling.pdf TRC Calculation.pdf Watershed Information.pdf 1973-209 CP-4.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)	0.05
Latitude	41º 5' 18"	Longitude	-75º 3' 30"
Quad Name	Bushkill	Quad Code	1045
Wastewater Description:	Sewage Effluent		
Receiving Waters	Bush Kill	Stream Code	5054
NHD Com ID	26138786	RMI	5.7
Drainage Area	85.9 mi^2	Yield (cfs/mi^2)	0.064
Q_{7-10} Flow (cfs)	5.49	Q_{7-10} Basis	Gage 01439500
Elevation (ft)	491	Slope (ft/ft)	0.002
Watershed No.	1-D	Chapter 93 Class.	HQ-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	Easton Area Water System		
PWS Waters	Delaware River	Flow at Intake (cfs)	297
PWS RMI	110.4	Distance from Outfall (mi)	~ 47

Treatment Facility Summary

Treatment Facility Name: Winona Wastewater Treatment Plant

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	Ultraviolet	0.05

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.05	98	Not Overloaded	Holding Tank	Hauled

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.05
Latitude 41º 5' 18" **Longitude** -75º 3' 30"
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
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Total Residual Chlorine	1.6	IMAX	-	92.48(b)(2)

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 DRBC Requirements
Ammonia-Nitrogen	1.5	Average Monthly	
May 1 – Oct 31	3.0	IMAX	
Ammonia-Nitrogen	3.5	Average Monthly	
Nov 1 - Apr 30	7.0	IMAX	
$CBOD_5$	8.5	Average Monthly	
	12.8	Average Weekly	
	17.0	IMAX	
Total Suspended Solids	10.0	Average Monthly	
	15.0	Average Weekly	
	20.0	IMAX	
Fecal Coliform	70.0 / 100 ml	Geo Mean	
	1,000 / 100 ml	IMAX	
Total Dissolved Solids	1,000	Average Monthly	
	2,000	IMAX	
Nitrate as N	4.0	Average Monthly	
	8.0	IMAX	
Total Kjeldahl Nitrogen	5.2	Average Monthly	
	10.4	IMAX	
Total Phosphorus	0.42	Average Monthly	
	0.84	IMAX	

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