Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0029777**
Facility Type	**Municipal**	APS ID	**1138596**
Major / Minor	**Minor**	Authorization ID	**1529409**

Applicant and Facility Information

Applicant Name	**Westgate Water & Sewer Municipal Authority**	Facility Name	**Westgate Water & Sewer Municipal Authority WWTP**
Applicant Address	184 Keiserville Road	Facility Address	Westgate Development Dornblazers Lane
	Tunkhannock, PA 18657-6135		Tunkhannock, PA 18657
Applicant Contact	Edward Coleman	Facility Contact	Eugenia Roche
Applicant Phone	(570) 836-1199	Facility Phone	(570) 341-6738
Client ID	76044	Site ID	450865
Ch 94 Load Status	Not Overloaded	Municipality	Washington Township
Connection Status	No Limitations	County	Wyoming
Date Application Received	June 3, 2025	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Request for Individual Sewage NPDES Permit Renewal

Summary of Review

The applicant is requesting renewal of an Individual Sewage NPDES Permit to authorize discharging 0.03 MGD of treated sewage to the Unnamed Tributary 29248 (stream code 29248) to Susquehanna River, a Cold-Water Fishes-Migratory Fishes (CWF-MF) designated receiving stream in PA state river basin 04-G (Mehoopany – Bowman Creeks). 2.86 miles downstream of Outfall 001, the Susquehanna River is a Warm-Water Fishes (WWF) designated stream impaired for fish consumption and has a final TMDL named “Susquehanna River Metals” caused by metals, low pH, aluminum, iron, and manganese. As per the Department’s existing use list, there is not a more protective existing use for either stream than the designated uses. The closest public water supply entry point is the Tunkhannock Borough Municipal Authority of Wyoming County approximately 11.69 miles downstream of the discharge point.

The Westgate Water & Sewer Municipal Authority (The WWTP) is a minor, non-commercial, extended aeration plant with a hydraulic design capacity of 0.03 MGD and annual average design flow of 0.01055 MGD in 2024. The WWTP contains an influent EQ tank, aeration basins, a clarifier, and disinfection. The disinfectant used is Sodium Hypochlorite. The applicant also adds dense soda ash to stabilize pH. Sewage sludge generated at the WWTP is hauled to Greater Hazleton Joint Sewer Authority by Environmental Service Corp of PA.

The permittee had 12 effluent violations in the past 5 years, including violations for Ammonia-Nitrogen (NH3-N), Total Residual Chlorine (TRC), and Total Suspended Solids (TSS). None of the violations involved the effluent reaching two times the effluent limit. These violations do not signify a chronic or significant problem with the plant. The permittee also submitted late DMR submissions for three monitoring periods in the past 5 years. These violations do not constitute withholding permit issuance for the permittee.

Limits for pH, $CBOD_5$, TSS, and Fecal Coliform are technology-based and carried over from the previous permit. Limits for Dissolved Oxygen (DO), Ammonia-Nitrogen (NH3-N), and TRC are water quality-based and carried over from the previous

Approve	Deny	Signatures	Date
X		Luca Jordache Luca Jordache / Environmental Engineer Trainee	June 27, 2025
X		Edward Dudick / Environmental Engineer Manager	June 27, 2025

Summary of Review

permit. Total Nitrogen (TN), Total Phosphorus (TP), Total Kjeldahl Nitrogen (TKN), and Nitrate-Nitrite as are carried over from the previous permit to fulfill the requirements of all individual sewage permits and anti-backsliding policy.

A new reporting requirement for E. Coli has been added, requiring the IMAX of E. Coli to be reported in No./100mL annually. All new and reissued sewage treatment plant permits are now required to include monitoring E. Coli in effluent according to 25 PA Code §92a.61(11)(12).

Water quality modeling was performed for this WWTP based on watershed information obtained from eMapPA and USGS' StreamStats. RMI values were obtained using the measure tool on eMapPA and StreamStats. Due to a lack of stream gages and historical data for the receiving stream along with the small drainage area of 0.059 mi^2 at Outfall 001, the Department's default LFY of 0.1 cfs/mi^2 was used. The stream gage "Susquehanna River at Wilkes-Barre, PA" was used to determine the LFY for the Susquehanna River. Neither WQM 7.0 nor the TRC Spreadsheet calculated more stringent limits for $CBOD_5$, NH3-N, DO, or TRC than what previously existed.

Daily Max limits have been added to this permit for NH3-N to account for an 8-hr composite sample not being "instantaneous". Adding a daily max limit that is identical to the IMAX will not require anything new of the permittee, but will help the DEP's Operations section keep better track of the highest values of a pollutant sample on eDMRs. For an 8-hr composite sample, the daily max should be the same as the IMAX.

The previous permit expires on November 30, 2025, and the application for renewal was received on time on June 3, 2025.

The most recent facility inspection occurred on August 29, 2024. All violations for the permittee are currently resolved.

The following documents were used to assist in the writing of this permit and fact sheet:

Watershed Info PA0029777.pdf

WQM 7.0 Results Westgate WWTP.pd

TRC_CALC.pdf

More resources are also attached on the last page of this fact sheet.

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)	0.03
Latitude	41º 35' 36.86"	Longitude	-76º 0' 48.98"
Quad Name	Meshoppen	Quad Code	0637
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Susquehanna River (CWF, MF)	Stream Code	29248
NHD Com ID	66405239	RMI	2.86
Drainage Area	0.59 mi^2	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	0.059	Q_{7-10} Basis	State-wide default
Elevation (ft)	1049	Slope (ft/ft)	0.03
Watershed No.	4-G	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	-
Nearest Downstream Public Water Supply Intake	Tunkhannock Borough Municipal Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	723
PWS RMI	11.69	Distance from Outfall (mi)	4.3

Treatment Facility Summary

Treatment Facility Name: Westgate Water & Sewer Municipal Authority

WQM Permit No.	Issuance Date
6602401	5/22/2002

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Aeration with Clarifiers	Sodium Hypochlorite	0.01055 (2024)

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.03	60	Not Overloaded	Digested	Hauled

Compliance History

DMR Data for Outfall 001 (from May 1, 2024 to April 30, 2025)

Parameter	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24
Flow (MGD) Average Monthly	0.012491	0.01192	0.0087	0.007762	0.01036	0.00894	0.00615	0.007559	0.00705	0.00705	0.00749	0.01075
Flow (MGD) Daily Maximum	0.01627	0.03679	0.01798	0.01382	0.03152	0.02092	0.00389	0.01024	0.0123	0.0123	0.00919	0.01706
pH (S.U.) Instantaneous Minimum	6.35	6.78	6.84	6.68	6.67	6.68	6.3	6.91	6.2	6.2	7.11	6.7
pH (S.U.) Instantaneous Maximum	7.54	7.84	7.65	7.46	7.49	7.83	7.71	7.73	7.42	7.42	7.89	7.6
DO (mg/L) Instantaneous Minimum	7.34	6.31	9.5	6.71	6.87	6.63	7.27	6.21	6.24	6.24	5.76	7.39
TRC (mg/L) Average Monthly	0.15	0.13	0.15	0.16	0.16	0.15	0.17	0.16	0.16	0.16	0.16	0.15
TRC (mg/L) Instantaneous Maximum	0.29	0.3	0.35	0.25	0.33	0.4	0.3	0.3	0.4	0.4	0.37	0.39
CBOD5 (lbs/day) Average Monthly	0.4	< 0.2	0.3	0.2	0.2	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.2
CBOD5 (lbs/day) Raw Sewage Influent Average Monthly	6	6	7	6	21	10	11	4	18	18	9	13
CBOD5 (lbs/day) Raw Sewage Influent Weekly Average	6	6	7	6	21	10	11	4	18	18	9	13
CBOD5 (lbs/day) Weekly Average	0.5	0.4	0.3	0.3	0.3	0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.2
CBOD5 (mg/L) Average Monthly	6.0	< 3.0	4.5	3.5	2.5	< 2.0	< 2.0	2.0	< 2.0	< 2	< 2.0	< 2.0
CBOD5 (mg/L) Raw Sewage Influent Average Monthly	98	96	134	89	318	205	196	52	279	279	158	138
CBOD5 (mg/L) Weekly Average	8.0	4.0	6.0	4.0	3.0	2.0	< 2.0	2.0	2.0	2	< 2.0	< 2.0
TSS (lbs/day) Average Monthly	0.2	< 0.5	< 0.3	< 0.2	0.3	< 0.2	< 0.2	< 0.2	< 0.3	< 0.3	< 0.2	0.5

TSS (lbs/day) Raw Sewage Influent Average Monthly	4	5	5	11	25	14	3	4	17	17	3	18
TSS (lbs/day) Raw Sewage Influent Weekly Average	4	5	5	11	25	14	3	4	17	17	3	18
TSS (lbs/day) Weekly Average	0.2	0.9	< 0.3	< 0.2	0.3	< 0.2	< 0.2	< 0.2	0.4	0.4	< 0.2	0.6
TSS (mg/L) Average Monthly	4.0	< 6.5	< 3.5	< 3.0	3.0	< 3.0	< 3.0	< 3.0	< 4.5	< 4.5	< 3.0	4.5
TSS (mg/L) Raw Sewage Influent Average Monthly	73	82	93	167	389	289	46	60	264	264	46	180
TSS (mg/L) Weekly Average	4.0	10	4.0	< 3.0	3.0	< 3.0	< 3.0	< 3.0	6.0	6	< 3.0	5.0
Fecal Coliform (No./100 ml) Geometric Mean	50	42	773	442	140	19	151	30	< 1	< 1	< 1	4.0
Fecal Coliform (No./100 ml) Instantaneous Maximum	68	75	921	980	488	20	225	153	< 1	< 1	< 1	10.0
Nitrate-Nitrite (mg/L) Annual Average					35.4							
Total Nitrogen (mg/L) Annual Average					36.4							
Ammonia (lbs/day) Average Monthly	0.05	0.009	0.02	< 0.006	0.009	0.006	0.006	0.008	0.01	0.01	0.009	0.02
Ammonia (mg/L) Average Monthly	0.75	0.12	0.22	< 0.1	0.1	0.12	0.12	0.11	0.17	0.17	0.14	0.18
TKN (mg/L) Annual Average					1.00							
Total Phosphorus (mg/L) Annual Average					25							

Compliance History

Effluent Violations for Outfall 001, from: June 1, 2024 To: April 30, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Dissolved Oxygen (DO)	06/30/24	Inst Min	5.76	mg/L	6.0	mg/L

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .03
Latitude 41º 35' 36.00" **Longitude** -76º 0' 48.00"
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	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)
	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)

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Total Residual Chlorine	0.2	Average Monthly	Previous modeling
	0.4	IMAX	
Dissolved Oxygen	6.0	Minimum	
Ammonia-Nitrogen Nov 1 – Apr 30	9.0	Average Monthly	
	18.0	IMAX	
Ammonia Nitrogen May 1 – Oct 31	3.0	Average Monthly	
	6.0	IMAX	

Anti-Backsliding

No limitations were made less stringent.

Tools and References Used to Develop Permit	
☒	WQM for Windows Model (see Attachment) WQM 7.0 Results Westgate WWTP.pd
☒	TRC Model Spreadsheet (see Attachment) TRC_CALC.pdf
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☒	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☒	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☒	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☒	SOP: Individual NPDES SOP - Sewage (Versi
☒	Other: Individual Sewage SOP - Effluent Limits