

Application Type Renewal  
Facility Type Industrial  
Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL INDUSTRIAL WASTE (IW)  
AND IW STORMWATER**

Application No. PA0244864  
APS ID 1045059  
Authorization ID 1364550

**Applicant and Facility Information**

Applicant Name	<u>Warminster Municipal Authority Bucks County</u>	Facility Name	<u>Warminster Municipal Authority Well #26</u>
Applicant Address	<u>415 Gibson Avenue Warminster, PA 18974-4163</u>	Facility Address	<u>Ivyland Road Warminster, PA 18974</u>
Applicant Contact	<u>Timothy Hagey</u>	Facility Contact	<u>Timothy Hagey</u>
Applicant Phone	<u>(215) 675-3301</u>	Facility Phone	<u>(215) 675-3301</u>
Client ID	<u>64798</u>	Site ID	<u>454812</u>
SIC Code	<u>4941</u>	Municipality	<u>Warminster Township</u>
SIC Description	<u>Trans. &amp; Utilities - Water Supply</u>	County	<u>Bucks</u>
Date Application Received	<u>July 26, 2021</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Groundwater remediation of potable water supply well.</u>		

**Summary of Review**

Permittee requests renewal of NPDES permit to discharge an average annual design flow of 0.266 mgd of treated groundwater from WMA Well No. 26 located in Warminster Township, Bucks County. This proposed discharge is to an unnamed tributary to Little Neshaminy Creek.

Raw groundwater is pumped from the well into the Air stripping Tower for VOC removal. Water is then filtered through a cartridge type bag pre-filter before flowing through an ion exchange resin filtration system for PFC's removal. Resin filtration system requires no backwash. Only a rinse upon initial installation of the resin which is sent to the sanitary sewer. Treated groundwater is discharged into an unnamed tributary to Little Neshaminy Creek.

WMA Well 26 is located adjacent to the former Warminster Naval Air Warfare Center (NAWC). WMA Well 26 was taken offline during the summer of 2014, and since that time WMA was conducting a pilot study for the remediation of groundwater contaminated with PFCs. Limits for PFCs including PFOA and PFOS are carried over in this renewal.

Similarly, WMA Well No. 26 is contaminated with TCE/PCE because of the well's proximity to the North Penn Area legacy contamination of the groundwater with these pollutants. Therefore, Trichloroethylene and Tetrachloroethylene are carried over in this renewal.

**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		<i>Vasantha</i> Vasantha Palakurti / Environmental Engineering Specialist	September 13, 2021
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	09/27/2021

**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.

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.	<u>001</u>	Design Flow (MGD)	<u>.266</u>
Latitude	<u>40° 12' 35.02"</u>	Longitude	<u>-75° 4' 40.95"</u>
Quad Name	<u></u>	Quad Code	<u></u>
Wastewater Description: <u>Groundwater Cleanup Discharge</u>			
Receiving Waters	<u>Unnamed Tributary to Little Neshaminy Creek (WWF, MF)</u>	Stream Code	<u>02647</u>
NHD Com ID	<u>25479768</u>	RMI	<u>0.9</u>
Drainage Area	<u>0.57</u>	Yield (cfs/mi <sup>2</sup> )	<u></u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.0141 QAH = 0.24</u>	Q <sub>7-10</sub> Basis	<u>USGS StreamStats 3.0</u>
Elevation (ft)	<u>254</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>2-F</u>	Chapter 93 Class.	<u>WWF, MF</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>FLOW REGIME MODIFICATION, PATHOGENS, POLYCHLORINATED BIPHENYLS (PCBS), SILTATION</u>		
Source(s) of Impairment	<u>SOURCE UNKNOWN, SOURCE UNKNOWN, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS</u>		
TMDL Status	<u>Final</u>	Name	<u>Neshaminy Creek</u>

Changes Since Last Permit Issuance: There are no changes since last permit issuance.

Compliance History

DMR Data for Outfall 001 (from August 1, 2020 to July 31, 2021)

Parameter	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20
Flow (MGD) Average Monthly	134	137	153	137	157	157	159	160	161	164	167	0.171
Flow (MGD) Daily Maximum	136	138	155	139	159	159	161	162	169	167	169	0.174
pH (S.U.) Instantaneous Minimum	8.3	8.3	8.3	8.2	8.2	8.3	8.3	8.3	8.2	8.2	8.2	8.2
pH (S.U.) Instantaneous Maximum	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.3	8.3	8.2	8.2
Tetrachloro-ethylene (mg/L) Average Monthly	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.001	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Tetrachloro-ethylene (mg/L) Instantaneous Maximum	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0018	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Trichloroethylene (mg/L) Average Monthly	< 0.00050											
Trichloroethylene (mg/L) Instantaneous Maximum	< 0.00050											
PFOA (mg/L) Average Monthly	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
PFOA (mg/L) Instantaneous Maximum	< 0.0023	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
PFOS (mg/L) Average Monthly	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
PFOS (mg/L) Instantaneous Maximum	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Total PFOA and PFOS (mg/L) Average Monthly	< 0.00002 0											

**NPDES Permit Fact Sheet  
Warminster Municipal Authority Well #26**

**NPDES Permit No. PA0244864**

Total PFOA and PFOS (mg/L) Instantaneous Maximum	< 0.00002 3	< 0.00002 0										
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**Compliance History**

As per the 3/11/2021 inspection report, In 2019, Warminster Well 26 reported several PFOS concentrations as less than <0.0002 mg/L. This detection limit was not low enough to comply with the NPDES permitted concentration limit for PFOS which is 0.00007 mg/L. Since 2019, the sample analysis issue for the PFOS parameter has been corrected. No other violations were noted during the inspection

**Development of Effluent Limitations**

Outfall No. 001 Design Flow (MGD) .266  
 Latitude 40° 12' 34.49" Longitude -75° 4' 41.13"  
 Wastewater Description: Groundwater Cleanup Discharge

**Technology-Based Limitations**

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	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)

Trichloroethylene and Tetrachloroethylene

Limits for Trichloroethylene and Tetrachloroethylene are carried over to renewal.

Total PFOA and PFOS

The EPA published final PFOA and PFOS Health Advisory Levels (EPA, May 2016) which are based on both short term (weeks to months) and lifetime human exposure. The published Health advisory level is a maximum total concentration of PFOA and PFOS of 0.070-ug/l. Therefore, limits for Total PFOA and PFOS are carried over

**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	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	9.0 IMAX	XXX	2/month	Grab
Tetrachloro-ethylene	XXX	XXX	XXX	0.001	XXX	0.0025	2/month	Grab
Trichloroethylene	XXX	XXX	XXX	0.004	XXX	0.010	2/month	Grab
PFOA	XXX	XXX	XXX	Report	XXX	Report	2/month	Grab
PFOS	XXX	XXX	XXX	Report	XXX	Report	2/month	Grab
Total PFOA and PFOS (ug/l)	XXX	XXX	XXX	0.07	XXX	0.175	2/month	Calculation