

Application Type Renewal
Facility Type Municipal
Major / Minor Major

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0058742
APS ID 1064775
Authorization ID 1398610

Applicant and Facility Information

Applicant Name	<u>Warminster Municipal Authority Bucks County</u>	Facility Name	<u>Warminster Nawc WWTP</u>
Applicant Address	<u>PO Box 2279 415 Gibson Avenue Warminster, PA 18974-0147</u>	Facility Address	<u>Jacksonville Road Warminster, PA 18974</u>
Applicant Contact	<u>Timothy Hagey</u>	Facility Contact	<u>George Pfeiffer</u>
Applicant Phone	<u>(215) 675-3301</u>	Facility Phone	<u>(215) 675-6113</u>
Client ID	<u>64798</u>	Site ID	<u>452256</u>
Ch 94 Load Status	<u></u>	Municipality	<u>Warminster Township</u>
Connection Status	<u></u>	County	<u>Bucks</u>
Date Application Received	<u>May 27, 2022</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u></u>	If No, Reason	<u>Major Facility</u>
Purpose of Application	<u>Renewal</u>		

Summary of Review

The applicant requests approval for the renewal of a National Pollutant Discharge Elimination System (NPDES) permit to discharge 1.2 mgd of treated sewage to an unnamed tributary to Little Neshaminy Creek. The facility is located on the site of the former Naval Air Warfare Center that closed in 1996. The treatment facility that was built in 1945 to serve the NAWC was removed from service and the new facility, owned and operated by Warminster Municipal Authority, was constructed in 2005.

The wastewater treatment plant consists of mechanical bar screen, aerated grit chamber, influent pumping station and distribution box, alum feed system, four sequencing batch reactors, filter screen, ultraviolet disinfection, and an effluent pumping station. Two aerobic digesters and a centrifuge are used for sludge thickening. The stabilized, dewatered sludge is trucked to a landfill for disposal. The WQM permit for the treatment facility is 0904403.

When the plant was put into operation in 2005, flows from Warminster's Sewage Pumping Station No. 7 were diverted to the facility to provide the initial flow and to free up 0.5 mgd of flow at Warminster's Log College Facility for use by Warrington Township. Since the Log College facility still has adequate capacity to handle those flows, the flow from SPS No.7 has been diverted back to Log College. An Act 537 Special Study was submitted to allow a temporary diversion of all flow from the NAWC WWTP to Log College for a period of 5 years. The facility is currently off-line and flows are being diverted to the Authority's Log College STP, operating under NPDES permit number PA0026166. During the period the facility is off-line, permittee is still required to submit DMR's electronically, specifying "No Discharge".

Since the facility has not been discharging, the facility was not required to submit analytical sample results and WETT results along with the current application. The limits in this permit are carried over from the previous permit.

At any time prior to the facility is placed back on-line, and upon commencement of discharge, the permittee shall:

Approve	Deny	Signatures	Date
x		<i>Vasantha</i> Vasantha Palakurti / Environmental Engineering Specialist	August 8, 2022
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	08/08/2022

Summary of Review

implement WET requirements (Part C.II), Pretreatment requirements (Part C.IV), and TRE requirements for Copper (Part C.V). It also requires submission of 1 influent and 3 effluent samples, similar to the requirements in the NPDES application.

Upon analyzing the sample results after the plant is placed back on-line, a detailed review will be conducted and If warranted, additional limits and/or monitoring requirements will be established through a permit amendment.

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>1.2</u>
Latitude	<u>40° 13' 0.87"</u>	Longitude	<u>-75° 4' 27.97"</u>
Quad Name	<u></u>	Quad Code	<u>08-23-01</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Little Neshaminy Creek</u>	Stream Code	<u>02647</u>
NHD Com ID	<u>25479732</u>	RMI	<u>1.44</u>
Drainage Area	<u>2.16 mi2</u>	Yield (cfs/mi ²)	<u>0.01</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.022 cfs</u>	Q ₇₋₁₀ Basis	<u>Previous WQPR</u>
Elevation (ft)	<u>215</u>	Slope (ft/ft)	<u>0.0051</u>
Watershed No.	<u>2-F</u>	Chapter 93 Class.	<u>WWF, MF</u>
Existing Use	<u>Same as Ch. 93</u>	Existing Use Qualifier	<u>na</u>
Exceptions to Use	<u>na</u>	Exceptions to Criteria	<u></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>
Nearest Downstream Public Water Supply Intake	<u>Aqua PA</u>		
PWS Waters	<u>Neshaminy Creek</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>9 mi</u>	Distance from Outfall (mi)	<u></u>

Stormwater Outfalls:			
Outfall 002	Latitude	<u>40° 12' 13"</u>	Longitude <u>75° 04' 43"</u>
Outfall 003	Latitude	<u>40° 12' 09"</u>	Longitude <u>75° 04' 45"</u>

Changes Since Last Permit Issuance: None

Development of Effluent Limitations

Outfall No. 001	Design Flow (MGD) 1.2
Latitude 40° 13' 1.00"	Longitude -75° 4' 28.00"
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)
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)

Conventional Parameters:

The existing limits of CBOD₅ and TSS = 10 mg/l year round, NH₃-N = 1.5 mg/l summer and 3.0 mg/l winter, and DO = 6.0 mg/l minimum are carried over to this permit.

Nitrite-nitrate limits are carried over from the previous permit and they are based on protection of the nearest downstream public water supply which is located approximately twenty miles below the discharge point.

Fecal coliform, BOD₅, TSS and UV remain unchanged for this renewal.

E-Coli has been added to this renewal as per the new requirement in the SOP No. BCW-PMT-033

Water Quality-Based Limitations

During the previous renewal, Copper was determined as a candidate for limitations and the following limit was calculated through water quality modeling

Parameter	Limit (µg/l)	Model
Copper	24 µg/l	PentoxSD and TMS

Due to the consideration that the discharge is currently diverted to Log College, the Copper in the previous renewal was set to monitor only with a condition in Part C.V to implement TRE requirements for Copper upon commencement of discharge. Permittee shall conduct TRE in accordance with the schedule in Part C.V.

TDS, Chloride and Phosphorous remain unchanged from the previous permit. Upon analyzing the sample results after the plant is placed back on-line, a detailed review will be conducted and If warranted, additional limits and/or monitoring requirements will be established through a permit amendment.

Whole Effluent Toxicity (WET)

Since the facility has not been discharging, the facility was not required to submit WETT results along with the current application. The limits in this permit are carried over from the previous permit.

At any time prior to the facility is placed back on-line, and upon commencement of discharge, the permittee shall implement WET requirements (Part C.II).

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	Weekly Average	Minimum	Daily Maximum	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD5	100	150	XXX	10 Avg Mo	15	20	1/day	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report Avg Mo	XXX	XXX	1/day	24-Hr Composite
TSS Raw Sewage Influent	XXX	XXX	XXX	Report Avg Mo	XXX	XXX	1/day	24-Hr Composite
TSS	100	150	XXX	10 Avg Mo	15	20	1/day	24-Hr Composite
Total Dissolved Solids	XXX	XXX	1000.0 Avg Mo	XXX	XXX	2500	1/month	24-Hr Composite
Fecal Coliform (No./100 ml)*	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/day	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
UV Transmittance (%)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Metered
Nitrate-Nitrite Jul 1 - Oct 31	95	XXX	XXX	9.5 Avg Mo	XXX	19	1/week	24-Hr Composite
Total Nitrogen	Report	XXX	XXX	Report Avg Mo	XXX	XXX	1/month	24-Hr Composite

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Daily Maximum	Weekly Average	Instant. Maximum		
Ammonia Nov 1 - Apr 30	30	XXX	XXX	3.0 Avg Mo	XXX	6	1/day	24-Hr Composite
Ammonia May 1 - Oct 31	15	XXX	XXX	1.5 Avg Mo	XXX	3	1/day	24-Hr Composite
Total Phosphorus Nov 1 - Mar 31	10	XXX	XXX	1.0 Avg Mo	XXX	2	1/week	24-Hr Composite
Total Phosphorus Apr 1 - Oct 31	5.0	XXX	XXX	0.5 Avg Mo	XXX	1	1/week	24-Hr Composite
Total Aluminum	XXX	XXX	XXX	Report Avg Mo	XXX	XXX	1/week	24-Hr Composite
Total Copper**	XXX	XXX	Report Avg Mo	Report	XXX	XXX	1/month	24-Hr Composite
Chloride	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Chronic WET - Ceriodaphnia Survival (TUc)	XXX	XXX	XXX	1.01	XXX	XXX	See Permit	24-Hr Composite
Chronic WET - Ceriodaphnia Reproduction (TUc)	XXX	XXX	XXX	1.01	XXX	XXX	See Permit	24-Hr Composite
Chronic WET - Pimephales Survival (TUc)	XXX	XXX	XXX	1.01	XXX	XXX	See Permit	24-Hr Composite
Chronic WET - Pimephales Growth (TUc)	XXX	XXX	XXX	1.01	XXX	XXX	See Permit	24-Hr Composite

at Outfall 001 *Not to exceed 1,000 /100 ml as an instantaneous maximum from May 1st through September 30th. Not to exceed 1,000 /100 ml in greater than 10 percent of samples tested from October 1st through April 30th. See Part C.I. Other Requirement F. ** For Copper, refer to Part C.V. Toxics Reduction Evaluation.

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 002, 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	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
CBOD5	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TKN	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

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 003, 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	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
CBOD5	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TKN	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab