pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0052515**
Facility Type		APS ID	**1076850**
Major / Minor	**Minor**	Authorization ID	**1419606**

Applicant and Facility Information

Applicant Name	**Ambler Borough Montgomery County**	Facility Name	**Ambler Borough Water Department**
Applicant Address	131 Rosemary Avenue	Facility Address	517 Bethlehem Pike
	Ambler, PA 19002		Fort Washington, PA 19034
Applicant Contact	Steven Smallberger	Facility Contact	Steven Smallberger
Applicant Phone	(215) 646-1000	Facility Phone	(215) 646-1000
Client ID	28586	Site ID	4099
Ch 94 Load Status	Not Overloaded	Municipality	Whitemarsh Township
Connection Status		County	Montgomery
Date Application Received	November 30, 2022	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Permit Renewal

Summary of Review

The permittee requests the approval of a NPDES individual permit to discharge treated groundwater from a public water supply well which was contaminated by a petroleum pipeline break in 1971 from the Ambler Borough Water Dept. Facility. This facility is located at 517 Bethlehem Pike, Fort Washington, PA.

The facility consists of an air stripper and dual GAC filters. Surface water is pumped to the treatment facility where it is treated by an air stripper and then a sequestrant (SLI-5135, Shannon Chemical Corp.) is added. A coagulant (C-39, Nalco Co.) is then fed to the water prior to flowing through dual granular activated carbon (GAC) filters and a series of chlorine contact tanks. There are three potential discharge points. Filter backwash is directed to a settling basin to be discharged through Outfall 001. According to the NPDES application, the discharge infiltrates and the valve is normally closed. The flow rate in the application is 12,750 gallons per day. Overflow from the clear well at the base of the air stripper discharges through Outfall 002. This flow consists of excess supply water that is diverted after treatment through the air stripper system. The minimum flow is 2,100 gallons per day and the maximum flow (if all flow is diverted to 002) is 450, 000 gallons per day.

There are no new changes to the plant that would change the treatment process, therefore limits are carried over from the previous permit.

Whitemarsh Township received written notification on August 31, 2022 by certified mail regarding this application to the Department.

Montgomery County Commissioners received written notification on August 31, 2022, by certified mail regarding this application to the Department.

Approve	Deny	Signatures	Date
x		*Vasantha* Vasantha Palakurti / Environmental Engineering Specialist	December 13, 2022
		Pravin C. Patel, P.E. / Environmental Engineer Manager	

Summary of Review
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)	.013
Latitude	40Âº 7' 30.44"	Longitude	-75Âº 13' 7.17"
Quad Name	Germantown	Quad Code	08-23-3
Wastewater Description:	Water Treatment Effluent		
Receiving Waters	Wissahickon Creek	Stream Code	00844
NHD Com ID	25960304	RMI	11.3
Drainage Area	40.8 mi2	Yield (cfs/mi^2)	0.21
Q_{7-10} Flow (cfs)	8.57 cfs	Q_{7-10} Basis	Previous WQPR
Watershed No.	3-F	Chapter 93 Class.	TSF, MF
Existing Use	na	Existing Use Qualifier	na
Exceptions to Use	na	Exceptions to Criteria	na
Assessment Status	Impaired		
Cause(s) of Impairment	Nutrients, Pathogens, Siltation, Water/Flow Variability		
Source(s) of Impairment	Municipal Point Source, Source Unknown, Urban Runoff/Storm Sewers		
TMDL Status	Final	Name	Wissahickon TMDL
Nearest Downstream Public Water Supply Intake	Philadelphia Water Department – Queen Lane Intake		
PWS Waters	Schuylkill River	Flow at Intake (cfs)	394
PWS RMI	12.6 mi.	Distance from Outfall (mi)	~12

Outfall 002 - Overflow outlet from air stripper clear well. Design flow 0.45 MGD. Same coordinates as Outfall 001.
Outfall 004 – Air stripper bypass. Design flow 0.45 MGD. Same coordinates as Outfall 001.

Compliance History

DMR Data for Outfall 001 (from November 1, 2021 to October 31, 2022)

Parameter	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21
Flow (MGD) Average Monthly	0.015	0.15	0.15							0.15	0.15	0.15
Flow (MGD) Daily Maximum	0.015	0.15	0.15							0.15	0.15	0.15
pH (S.U.) Instantaneous Minimum	7.94	8.10	8.09							8.27	8.31	8.43
pH (S.U.) Instantaneous Maximum	8.22	8.26	8.20							8.31	8.33	8.56
TRC (mg/L) Average Monthly	0.06	0.06	0.04							0.14	0.055	0.06
TRC (mg/L) Instantaneous Maximum	0.09	0.07	0.06							0.17	0.10	0.06
TSS (lbs/day) Average Monthly	0.083	1.88	1.00							0.18	0.437	0.81
TSS (lbs/day) Daily Maximum	0.135	2.13	1.00							0.25	0.625	1.00
TSS (mg/L) Average Monthly	6.0	15.0	8.0							1.5	3.5	6.5
TSS (mg/L) Daily Maximum	9.0	17.0	8.0							2.0	5.0	8.0
Total Aluminum (lbs/day) Average Monthly	0.007	0.16	0.07							0.02	0.037	0.04
Total Aluminum (lbs/day) Daily Maximum	0.007	0.16	0.11							0.03	0.048	0.05
Total Aluminum (mg/L) Average Monthly	0.49	1.3	0.61							0.21	0.3	0.36
Total Aluminum (mg/L) Daily Maximum	0.49	1.3	0.89							0.30	0.39	0.40
Total Iron (lbs/day) Average Monthly	< 0.001	0.01	0.007							0.007	0.007	0.007

Total Iron (lbs/day) Daily Maximum	0.001	0.01	0.007							0.007	0.007	0.007
Total Iron (mg/L) Average Monthly	< 0.050	0.08	0.06							0.06	0.06	0.06
Total Iron (mg/L) Daily Maximum	0.039	0.094	0.060							0.060	0.060	0.06
Total Manganese (lbs/day) Average Monthly	0.0001	0.001	0.001							0.001	0.001	0.001
Total Manganese (lbs/day) Daily Maximum	0.0001	0.001	0.001							0.001	0.001	0.001
Total Manganese (mg/L) Average Monthly	0.0082	0.01	0.01							0.009	0.011	0.012
Total Manganese (mg/L) Daily Maximum	0.0087	0.0097	0.0081							0.011	0.013	0.015
Gasoline Range Organics (mg/L) Average Monthly	< 0.100	< 0.100	< 0.1							< 0.1	< 0.15	< 0.1
Gasoline Range Organics (mg/L) Daily Maximum	< 0.100	< 0.100	< 0.100							< 0.100	< 0.15	< 0.100
Diesel Range Organics (mg/L) Average Monthly	< 0.16	< 0.15	< 0.15							< 0.15	< 0.1	< 0.16
Diesel Range Organics (mg/L) Daily Maximum	< 0.16	< 0.15	< 0.15							0.15	< 0.100	< 0.16

DMR Data for Outfall 002 (from November 1, 2021 to October 31, 2022)

Parameter	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21
Flow (MGD) Daily Maximum		0.450						0.450			0.450	
pH (S.U.) Daily Maximum		8.08						8.39			8.50	
TSS (mg/L) Daily Maximum		< 1						< 1			8	
Gasoline Range Organics (mg/L) Daily Maximum		< 0.100						< 0.100			< 0.100	

Diesel Range Organics (mg/L) Daily Maximum		< 0.15						< 0.15			< 0.15	

DMR Data for Outfall 004 (from November 1, 2021 to October 31, 2022)

Parameter	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21
Flow (MGD) Daily Maximum	0.450	0.450	0.450							0.450	0.450	0.450
pH (S.U.) Daily Maximum	7.38	7.46	7.69							7.92	7.66	7.74
TSS (mg/L) Daily Maximum	< 1	< 1	< 1							< 1	1	2
Gasoline Range Organics (mg/L) Daily Maximum	< 0.100	< 0.100	< 0.100							< 0.100	< 0.100	< 0.100
Diesel Range Organics (mg/L) Daily Maximum	< 0.15	< 0.15	< 0.15							< 0.15	< 0.15	< 0.15

Compliance History

The facilities permit renewal application was past due.

Development of Effluent Limitations

TSS, Total Aluminum, Total Iron, Total Manganese, and pH

Limits were given for TSS, Total Aluminum, Total Iron, Total Manganese, and pH at 30 mg/l, 4.0 mg/l, 2.0 mg/l, 1.0 mg/l, and 6-9 standard units, respectively. The limits represent Best Practicable Control Technology Currently Achievable (BPT) based on DEP guidance document 362-2183-003 "Technology-Based Control Requirements for Water Treatment Plant Wastes." Permit also includes the same requirement as previous permit to monitor Gasoline Range Organics and Diesel Range Organics.

TRC

TRC limit is the same as previous permit and is included because finished water is used for the backwash.

Similar to previous permit, monitoring for Gasoline Range Organics, Diesel Range Organics, TSS, and pH is required for Outfalls 002 and 004. Monitoring frequencies for all outfalls remain unchanged.

The Q7-10 dilution ratio is >400:1. Due of significant dilution, water quality-based limits do not apply. Technology based limits apply. No significant changes have occurred since that evaluation.)

Two additives are used at the facility. Shannon Chemical Corp. product SLI-5135 is a blended polyphosphate sequestrant that is added before the air stripper. It was originally approved by letter dated March 3, 2008. The application indicates Nalco C-39 is used as a coagulant.

Anti-Backsliding

N/A

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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	2/month	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	2/month	Grab
TSS	2.63	5.25	XXX	30.0	60.0	75	2/month	Grab
Total Aluminum	0.35	0.70	XXX	4.0	8.0	10	2/month	Grab
Total Iron	0.18	0.35	XXX	2.0	4.0	5	2/month	Grab
Total Manganese	0.09	0.18	XXX	1.0	2.0	2.5	2/month	Grab
Gasoline Range Organics	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab
Diesel Range Organics	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab

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Outfall 002 and 004, 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		
Flow (MGD)	XXX	Report Daily Max	XXX	XXX	XXX	XXX	1/quarter	Estimate
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Gasoline Range Organics	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Diesel Range Organics	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

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Outfall 004, 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		
Flow (MGD)	XXX	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Gasoline Range Organics	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Diesel Range Organics	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab