

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0021512
APS ID 1075479
Authorization ID 1417251

Applicant and Facility Information

Applicant Name	<u>PA American Water Co.</u>	Facility Name	<u>Royersford Borough STP</u>
Applicant Address	<u>852 Wesley Drive</u> <u>Mechanicsburg, PA 17055-4436</u>	Facility Address	<u>600 S First Avenue</u> <u>Royersford, PA 19468</u>
Applicant Contact	<u>Kristn May</u>	Facility Contact	<u>Jack Huzzard</u>
Applicant Phone	<u>(484) 946-7453</u>	Facility Phone	<u>(610) 721-4532</u>
Client ID	<u>87712</u>	Site ID	<u>256634</u>
Ch 94 Load Status	<u>Existing Hydraulic Overload</u>	Municipality	<u>Upper Providence Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Montgomery</u>
Date Application Received	<u>June 17, 2022</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u></u>	If No, Reason	<u>, DEP Discretion</u>
Purpose of Application	<u>Renewal.</u>		

Summary of Review

The permittee has submitted a renewal application for their treated sewage discharge to Schuylkill River (WWF, MF) through Outfall 001.

The facility is serving Royersford Borough (91%), Limerick Township (8%) and Upper Providence Township (1%).

Two influent streams enter the plant at separate locations. One stream, collecting from north side of the borough, empties into a wet well which has a muffin monster. The other side collects from the south and east sides of the borough. Both passes through Lakeside mechanical screen. Both sides are metered for flow. The flow then goes into Primary clarifiers (3), then trickling filters (2) and secondary clarifiers (3), and then chlorine contact tanks (2) and stream discharge. Sludge is anaerobic digested and store in sludge vaults prior to haul off at local POTW (Pottstown) for final disposal.

DEP has conducted a sit visit on 3/18/2022.
Below is summary of the inspection:

Comments

Inspection was done with operator Jack Huzzard present. Work was being done in one train of the primary clarifiers. The flights, chains and shafts are being replaced. Mr. Huzzard stated that they will be replacing the other train as well once the work is finished on the offline train. Some of the scum and sludge appeared to dark and getting old. Mr. Huzzard stated that they are planning to haul out sludge soon. One of the trickling filters appeared to have some slight ponding from mop heads which I recommended be removed. The secondary clarifiers appeared slightly cloudy but final effluent looked clear. I was not able to directly observe the final outfall.

No industrial users are reported.

There are no changes in quality and quantity of the discharge, therefore all previously approved applicable effluent limits and monitoring requirements are proposed except for E.Coli. As per new requirements of SOP for effluent limits for sewage

Approve	Deny	Signatures	Date
X		<i>Begay Omuralieva</i> Begay Omuralieva / Environmental Engineering Specialist	November 23, 2022
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	11/23/2022

Summary of Review

discharges monitoring requirements E.Coli quarterly monitoring is included (see p. 8 for development of effluent limits and pages 9-10 for propose effluent limits and monitoring requirements) .

Sludge use and disposal description and location(s): Hauled in Pottstown WWTP

Act 14 Notification:

Montgomery County Board of Commissioners - 3/18/2022
Board of Supervisors Upper Providence Township – 6/6/2022
Royersford Borough Hall – 6/20/2022

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)	0.7
Latitude	40° 10' 36.21"	Longitude	-75° 32' 29.23"
Quad Name		Quad Code	
Wastewater Description: Sewage Effluent			
Receiving Waters	Schuylkill River (WWF, MF)	Stream Code	00833
NHD Com ID	133228812	RMI	
Drainage Area	1200	Yield (cfs/mi ²)	
Q ₇₋₁₀ Flow (cfs)	274	Q ₇₋₁₀ Basis	DRBC DOCKET NO. D-2006-045 CP-3
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-D	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Schuylkill River PCB TMDL
Nearest Downstream Public Water Supply Intake	Phoenixville Borough		
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	1.7

Changes Since Last Permit Issuance:

Other Comments:

Treatment Facility Summary				
Treatment Facility Name: Royersford Borough STP				
WQM Permit No.	Issuance Date			
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Trickling Filter With Settling	Gas Chlorine	0.7
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
1.0	1751	Existing Hydraulic Overload	Anaerobic Digestion	Other WWTP

Changes Since Last Permit Issuance: none

Compliance History

DMR Data for Outfall 001 (from October 1, 2021 to September 30, 2022)

Parameter	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21
Flow (MGD) Average Monthly	0.163	0.169	0.185	0.206	0.31	0.378	0.285	0.350	0.320	0.320	0.320	0.200
Flow (MGD) Daily Maximum	0.658	0.369	0.338	0.296	1.05	1.23	0.493	0.802	0.530	0.430	0.440	0.435
pH (S.U.) Instantaneous Minimum	6.69	7.11	6.69	6.90	4.25	6.32	6.1	6.53	6.33	6.08	6.40	6.65
pH (S.U.) Instantaneous Maximum	7.85	7.66	7.53	7.64	7.74	7.73	7.22	7.75	7.81	7.72	7.81	8.12
DO (mg/L) Instantaneous Minimum	7.01	6.79	6.62	7.32	7.95	8.17	8.06	9.24	6.91	6.47	6.66	7.00
TRC (mg/L) Average Monthly	0.04	< 0.03	0.04	0.03	0.04	< 0.02	< 0.03	0.02	0.02	0.03	0.03	0.04
TRC (mg/L) Instantaneous Maximum	0.09	0.09	0.11	0.06	0.08	0.05	0.08	0.07	0.06	0.15	0.26	0.21
CBOD5 (lbs/day) Average Monthly	10.0	11	18	17	35.0	25	24	32.4	45.6	17.9	22.7	23.0
CBOD5 (lbs/day) Weekly Average	13.0	25	25	24	35.0	39	38	38.9	59.6	20.9	35.8	32.0
CBOD5 (mg/L) Average Monthly	6.1	6.7	12.2	9.5	8.0	9.3	9.1	12.0	14.7	7.0	8.0	14.0
CBOD5 (mg/L) Weekly Average	9.0	16.6	17.5	11.0	7.8	10.7	13.0	14.0	13.5	7.1	13.0	18.0
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	159.0	337	296	357	480	499	475	463.0	469.0	611	541.0	292.0
BOD5 (mg/L) Raw Sewage Influent Average Monthly	114.0	224	195	199	201	207	187	177.0	154.8	228	185.0	189.0
TSS (lbs/day) Average Monthly	8.0	11	11	13	21.0	67	30	25.4	34	35.8	26.8	9.3

**NPDES Permit Fact Sheet
Borough Of Royersford STP & Sewer System**

NPDES Permit No. PA0021512

TSS (lbs/day) Raw Sewage Influent Average Monthly	119.0	143	85	281	398	637	980	1698.0	722	870.2	969.5	140.4
TSS (lbs/day) Weekly Average	10.0	26	18	18	47.0	128	35	34.3	41	46.8	42.0	13.4
TSS (mg/L) Average Monthly	5.1	6.8	7.2	7.3	7.4	17.5	11.8	10.0	11.0	13.0	9.0	6.0
TSS (mg/L) Raw Sewage Influent Average Monthly	65.0	94	56	166	173	260	365	608.0	246.6	377.0	335.0	91.0
TSS (mg/L) Weekly Average	8.0	16.5	12.8	11.0	10.5	21.0	13.0	13.0	10.0	16.0	14.0	8.0
Total Dissolved Solids (mg/L) Average Monthly	644.0	609.0	548.0	484.0	415.0	588.0	901.0	668.0	790.0	562.0	646.0	686.0
Total Dissolved Solids (mg/L) Daily Maximum	644.0	919.0	548.0	484.0	415.0	692.0	901.0	668.0	790.0	562.0	646.0	686.0
Fecal Coliform (No./100 ml) Geometric Mean	26.0	2	< 1	42	7	26	1	1.0	2.0	1	3.0	1.0
Fecal Coliform (No./100 ml) Instantaneous Maximum	15100	4	1	2900	727	20000	2	2.0	9	2	28.0	3.0
Total Nitrogen (lbs/day) Average Monthly	66.0	32	23	60	30	83	71	68.1	81	76.5	69.7	37.7
Total Nitrogen (mg/L) Average Monthly	29.1	21.4	15.6	24.5	6.9	22.3	23.8	21.9	27.4	28.9	26.6	23.2
Ammonia (lbs/day) Average Monthly	0.6	0.2	< 0.2	0.2	2	< 5	8	11.5	9	4.0	3.1	0.6
Ammonia (mg/L) Average Monthly	0.3	0.15	< 0.14	0.01	0.81	< 1.28	3.04	4.0	2.9	2.0	1.0	0.4
Total Phosphorus (lbs/day) Average Monthly	3	2	2	3	2	4	2	2.8	6	4.0	3.0	1.1
Total Phosphorus (mg/L) Average Monthly	2.0	0.146	1.32	1.94	0.62	1.22	0.87	1.0	2.0	2.0	1.0	0.64

Anti-Backsliding

Not Applicable

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	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/day	Grab
CBOD5	117	175	XXX	20.0	30.0	40	1/week	24-Hr Composite
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TSS	117	175	XXX	20.0	30.0	40	1/week	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	1000.0	2000.0 Daily Max	2500	1/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Fecal Coliform (No./100 ml)* May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/quarter	Grab

Outfall001 , Continued (from 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	Average Monthly	Weekly Average	Instant. Maximum		
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Ammonia	35	XXX	XXX	6.0	XXX	12	1/week	24-Hr Composite
Total Phosphorus	12	XXX	XXX	2.0	XXX	XXX	1/week	24-Hr Composite
PCBs (Dry Weather) (pg/L)	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	24-Hr Composite

Compliance Sampling Location: Outfall 001

* shall not exceed in more than 10 percent of samples. See Permit's Part C – Other Requirements – H.