pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0284921**
Wastewater Type	**Sewage**	APS ID	**1066070**
Facility Type	**SRSTP**	Authorization ID	**1400736**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Brandon Riggle**	Facility Name	**Riggle Properties SRSTP**
Applicant Address	1349 Smith Township State Road	Facility Address	1349 Smith Township State Road
	Burgettstown, PA 15021-2830		Burgettstown, PA 15021-2830
Applicant Contact	Brandon Riggle	Facility Contact	Same as Applicant
Applicant Phone	(304) 914-8940	Facility Phone	Same as Applicant
Client ID	370765	Site ID	858153
SIC Code	8800	Municipality	Smith Township
SIC Description	Private Households	County	Washington
Date Application Received	June 20, 2022	WQM Required	Yes
Date Application Accepted	June 24, 2022	WQM App. No.	6322402

Project Description: Application for a new NPDES Permit for discharge of treated sewage.

Summary of Review

The permittee proposes to construct a 0.0004 MGD single residence treatment facility to replace a malfunctioning on lot septic system serving an existing single-family residence.

The system from this facility is treated with extended aeration, and UV disinfection prior to discharging to Burgetts Fork (ID 33846), which is warm water fishery.

Associated WQM Permit No. 6322402 is also pending issuance by the department.

Single Residence Sewage Treatment Plant Permittees are not required to register for eDMR.

Act 14 – PL 834 Municipal Notification was provided by letters sent to Smith Township and Washington County and dated June 8, 2022.

Sludge use and disposal was not indicated on the application.

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*

Approve	Deny	Signatures	Date
X		Stephanie Conrad / Environmental Engineering Specialist	July 15, 2022
x		Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineer Manager	July 26, 2022

Summary of Review
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 and Stream Data – 2 - Receiving Waters and PWS

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	40º 19' 42"	Longitude	-80º 22' 5"
Quad Name	Midway	Quad Code	1603
Wastewater Description:	Sewage Effluent		

Receiving Waters	Burgetts Fork (WWF)	Stream Code	33846
NHD Com ID	99691578	RMI	6.36
Drainage Area	4.05	Yield (cfs/mi^2)	0.0115
Q_{7-10} Flow (cfs)	0.0468	Q_{7-10} Basis	USGS Stream Stats
Elevation (ft)		Slope (ft/ft)	
Watershed No.	20-D	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Metals, Ph, Siltation, Total Suspended Solids (Tss)		
Source(s) of Impairment	Acid Mine, Grazing in Riparian or Shoreline Zones, Removal Of Riparian Vegetation		
TMDL Status	Final	Name	Raccoon Creek Watershed

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake	Duquesne Light Co-BVPS #1		
PWS Waters	Ohio River	Flow at Intake (MGD)	1.58
PWS RMI	946.07	Distance from Outfall (mi)	47.45

Changes Since Last Permit Issuance: N/A, new permit issuance

Other Comments: None

Treatment Facility Summary				
Treatment Facility Name: Riggle Properties SRSTP				
WQM Permit No.	**Issuance Date**			
6322402	Under Department Review			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Tertiary	Extended Aeration and Biofilm filtration	Ultraviolet (UV)	0.0004
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.0004		N/A		

Changes Since Last Permit Issuance: N/A- New Permit Issuance

Other Comments: WQM Permit No. 6322402, currently under Department review, approves construction of a STP with a rated annual average design flow of 0.0004 MGD. The treatment process consists of:

- One (1) 1300-gallon Singulair Bio-Kinetic Model 960-500 extended aeration treatment
- One (1) 1055-gallon Hydro-Kinetic-Bio-Film Reactor
- One (1) Model AT 1500 UV disinfection.

Act 537 Planning was approved for this project on July 8, 2021

Compliance History

Other Comments: **This is a new facility therefore there is no applicable compliance history.**

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0004
Latitude 40º 19' 42.00" **Longitude** -80º 22' 5.00"
Wastewater Description: Sewage Effluent

Technology-Based Limitations (TBELs)

The following effluent limitations and monitoring requirements, at a minimum, will be established in all new and renewed SFTF permits based on the requirements of DEP's "Standard Operating Procedure (SOP) for Clean Water Program New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application" (SOP No. BCW-PMT-003, Version 1.8, Final, November 9, 2012, Revised May 17, 2019).

Parameter	Avg	IMAX	Sample Type	Frequency: SFTFs	Frequency: SRSTPs
Flow (GPD)	Report	XXX	Estimate (SRSTPs) Measured (SFTFs)	1/month	1/year
BOD5 (mg/L)	10	20	Grab	1/month	1/year
TSS (mg/L)	10	20	Grab	1/month	1/year
pH*	6.0 S.U. Inst. Min.	9.0 S.U.	Grab	1/month	1/year
TRC (mg/L)	Report for SRSTPs; Use TRC Spreadsheet to determine WQBELs or 0.02 mg/L for SFTFs		Grab	1/month	1/month
Fecal Coliform (No./100 ml)	200 Geometric Mean (SFTFs) / Average (SRSTPs)		Grab	1/month	1/year

***** Technology-Based effluent limits for pH will be imposed based upon Federal Regulation 133.102(c) and State Regulation 95.2(1).

Additional Considerations

Ultraviolet (UV) disinfection is used; therefore, Total Residual Chlorine (TRC) limits are not applicable. Routine monitoring of UV transmittance or intensity is not required for SRSTPs.

SRSTPs are not required to monitor for Total Nitrogen or Total Phosphorus in new and reissued permits.

Raccoon Creek Watershed TMDL

Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's Water Quality Planning and Management Regulation (codified at Title 40 of the Code of Federal Regulations Part 130) requires states to develop a TMDL for impaired water bodies. A TMDL establishes the amount of a pollutant that a water body can assimilate without exceeding water quality criteria for the pollutant. TMDLs also provide a scientific basis for States to establish water quality-based controls for reducing pollution from both point and non-point sources in order to restore and maintain the quality of the state's water resources (USEPA 1991a). Stream reaches within the Racoon Creek Watershed were included in state's 1996, 1998, and 2002 Section 303(d) lists because of metal and pH impairments.

Riggle Properties SRSTP (PA0284921) discharges to the Racoon Creek Watershed for which a TMDL was finalized on February 3, 2005. The TMDL addresses metals and pH impairments associated with abandoned mine drainage. Riggle Properties SRSTP is not anticipated to contribute to the stream impairment and no waste load allocations have been developed for this facility. No monitoring requirements for total iron, total manganese, or total aluminum will be imposed during this permit cycle.

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	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Grab
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/year	Grab
BOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001

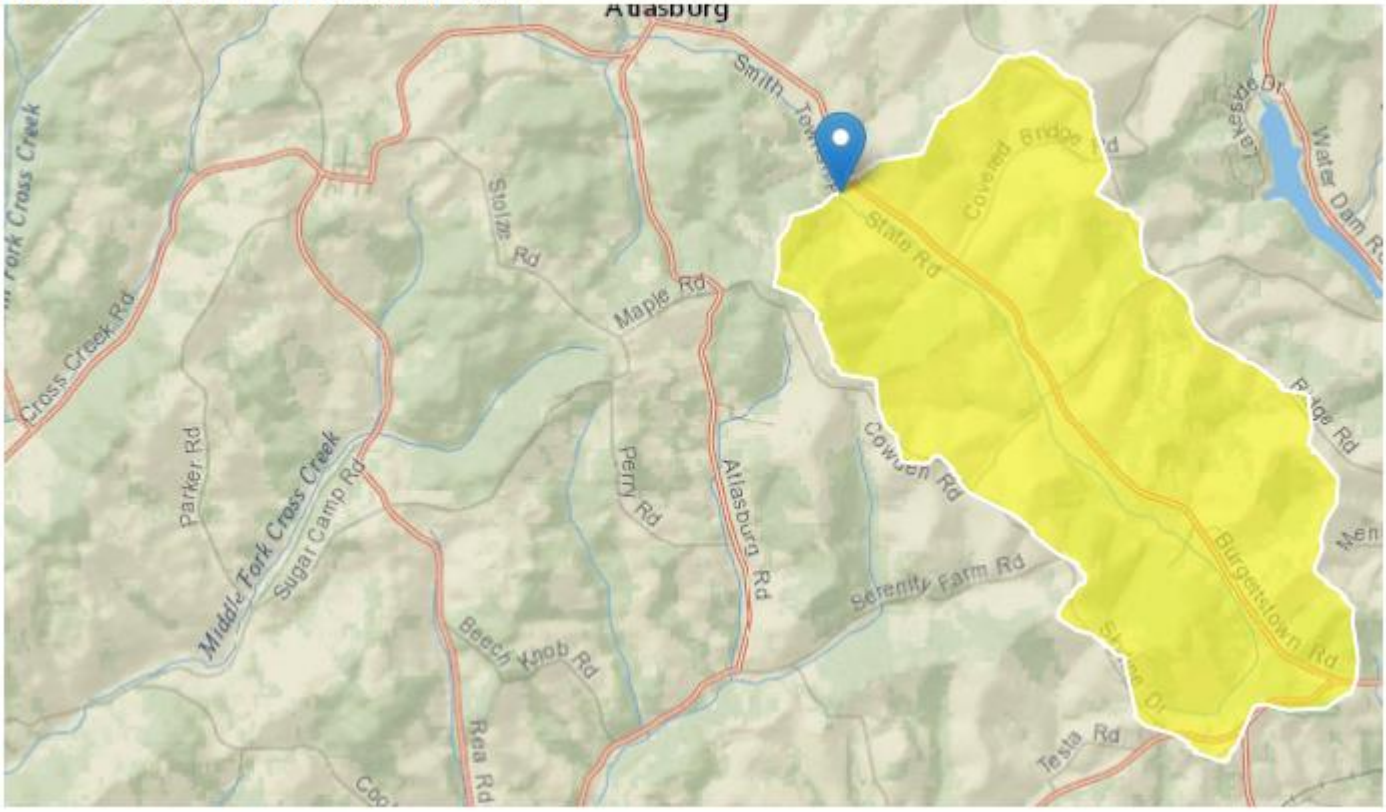
Other Comments: None

ATTACHMENT A

USGS Stream Stats Output

StreamStats Report

Region ID: PA
Workspace ID: PA20220715121352065000
Clicked Point (Latitude, Longitude): 40.32814, -80.36812
Time: 2022-07-15 08:14:11 -0400



Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	4.05	square miles	2.26	1400
ELEV	Mean Basin Elevation	1232	feet	1050	2580

Low-Flow Statistics Flow Report [Low Flow Region 4]

PII: Prediction Interval-Lower, Plu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	0.141	ft^3/s	43	43
30 Day 2 Year Low Flow	0.256	ft^3/s	38	38
7 Day 10 Year Low Flow	0.0468	ft^3/s	66	66
30 Day 10 Year Low Flow	0.0904	ft^3/s	54	54
90 Day 10 Year Low Flow	0.174	ft^3/s	41	41

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)