pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0254860**
Wastewater Type	**Sewage**	APS ID	**1008206**
Facility Type	**SRSTP**	Authorization ID	**1299716**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Raymond William**	Facility Name	**Raymond SRSTP**
Applicant Address	5431 Yukon Court Suite A	Facility Address	969 Peninsula Drive Indian Lake Borough
	Fedrick, MD 21703		Central City, PA 15926
Applicant Contact	Raymond William	Facility Contact	Raymond William
Applicant Phone	240-674-8847	Facility Phone	240-674-8847
Client ID	330342	Site ID	780888
SIC Code	8800	Municipality	Indian Lake Borough
SIC Description	Private Households	County	Somerset
Date Application Received	December 19, 2019	WQM Required	Yes
Date Application Accepted	January 23, 2020	WQM App. No.	5614401, Issued October 28, 2014

Project Description: NPDES permit renewal for existing SRSTP

Summary of Review

On December 19, 2019 the Department received a renewal application for NPDES permit PA0254860. The application was received late after the permit expired on October 31, 2019, however the expired permit number will be retained. The facility's discharge is via Outfall 001 to an unnamed tributary (referred to as Indian Lake) of Rhoads Creek, which is classified as a Cold Water Fishery in 25 Pa. Code Chapter 93. Rhoads Creek is a tributary of Stony Creek River. This facility is not eligible for a General NPDES permit because the design in not in accordance with the current Small Flow Treatment Facilities Manual (362-0300-002) design requirements.

Authorization to construct the facility was granted under Water Quality Management (WQM) Permit No. 5614401, issued on October 28, 2014. The 0.0004 MGD (400 gpd) facility consists of a 1000 gallon dual compartment septic tank with effluent filter, a biofilter with peat filter media, a chlorinator, and a 500 gallon chlorine contact tank. The permittee entered an Operation and Maintenance Agreement with Musser Sewage Specialists, LLC but the contractor has since terminated the contract. The permittee is in the process of being trained and will collect future samples themselves. The permittee has a Maintenance Agreement with Premier Tech Environmental (manufacturer) for the Ecoflo Biofilter. The current permit issued on October 23, 2014 has the following effluent limitations:

Parameter	Average Monthly (mg/L)	Instant. Maximum (mg/L)	Measurement Frequency	Sample Type
Flow (MGD)	Report	XXX	1/year	Measured
Total Residual Chlorine (TRC)	Report	XXX	1/quarter	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	10	20	1/year	Grab
Total Suspended Solids	10	20	1/year	Grab
Fecal Coliform (No./100 mL)	200 Geo Mean	XXX	1/year	Grab

Approve	Deny	Signatures	Date
X		Nicole H. Benoit, P.E. / Environmental Engineering Specialist	January 23, 2021
X		Christopher Kriley, P.E. / Environmental Program Manager	January 25, 2021

Summary of Review

Effluent limitations for renewal will be established in accordance with the Standard Operating Procedure *SOP No. BCW-PMT-003; Final, November 9, 2012; Revised, May 17, 2019; Version 1.8; New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications*.

Rhoads Creek is located within the Kiskimentas-Conemaugh TMDL however no Wasteload Allocation (WLA) has been assigned to the facility. Due to the small flow and no reasonable potential to contribute to the acid mine drainage impacts, no limitations or monitoring will be imposed for the impairment pollutants of concern.

Sewage discharges with design flows < 2,000 gpd do not require monitoring for Total Nitrogen and Total Phosphorus in new and reissued permits.

The effluent limitations in the current permit issued in 2014 are the same effluent limitations and sampling frequency recommended in the SOP except for the TRC frequency and CBOD5 instead of BOD5.

The SOP recommends TRC monitored once per month, but the SOP also states: *If an existing facility has been well-maintained and monitoring frequencies in the existing permit are less stringent than those below, the existing frequencies may be carried over to the renewal, but in no case may monitoring be "upon request."* The compliance review indicated that this facility has not submitted Discharge Monitoring Reports (DMRs) nor Annual Monitoring Reports (AMRs) as required in the permit. A routine Department inspection has not occurred yet either, however the Operations section has been notified and intends to conduct an inspection once the permit has been issued and review the permit conditions with the permittee. The TRC frequency will remain once per quarter since this residence is a secondary home and is occupied only occasionally. Future permit renewals should reconsider the sampling frequency if future DMR data suggests inadequate performance of the system. Reporting of flow will be set to quarterly as well.

The recommended BOD5 limits are an average of 10 mg/L and an IMAX of 20 mg/L. The current permit imposed CBOD5 at the same concentration levels as the recommended BOD5. The BOD5 analytical test measures carbonaceous organic material as well as nitrogenous materials whereas the CBOD5 analytical test only measures the carbonaceous organic material. An elevated BOD5 result will therefore indicate if either carbonaceous or nitrogenous (including ammonia) chemicals are present in the discharge. Since BOD5 is inclusive of CBOD-5 and the concentrations will remain the same, the effluent limitation is more stringent and does not violate anti-backsliding requirements. The renewed permit will impose effluent limitations for BOD5 at the recommended 1/year frequency.

The applicant has complied with Act 14 Notifications and no comments were received.

The permittee does not use eDMR and current policy does not require eDMR to be used for SFTFs.

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)	0.0004
Latitude	40º 02' 47"	Longitude	-78º 51' 55"
Quad Name	Central City	Quad Code	1815
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary (Indian Lake) to Rhoads Creek (CWF)	Stream Code	45737
NHD Com ID	123716706	RMI	4.4900
Drainage Area	5.44 sq. mi.	Yield (cfs/mi^2)	0.064
Q_{7-10} Flow (cfs)	0.349	Q_{7-10} Basis	U.S.G.S. StreamStats
Elevation (ft)	2300	Slope (ft/ft)	0.00001
Watershed No.	18-E	Chapter 93 Class.	CWF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	None
Assessment Status	Not Assessed		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	Final	Name	Kiskiminetas-Conemaugh River Watersheds TMDL

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

Nearest Downstream Public Water Supply Intake		Hooversville Municipal Authority	
PWS Waters	Stony Creek River	Flow at Intake (cfs)	N/A
PWS RMI	25	Distance from Outfall (mi)	17

Changes Since Last Permit Issuance: None

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 Avg Quarterly	XXX	XXX	XXX	XXX	XXX	1/quarter	Measured
Total Residual Chlorine (TRC)	XXX	XXX	XXX	Report Avg Quarterly	XXX	XXX	1/quarter	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
Total Suspended Solids	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/year	Grab

Compliance Sampling Location: 001

Appendices

Chapter 93 Designation

U.S.G.S. StreamStats Watershed Delineation and Low Flow Analysis

Source

The provisions of this § 93.9s adopted March 6, 1992, effective March 7, 1992, 22 Pa.B. 1037; amended July 17, 1992, effective July 18, 1992, 22 Pa.B. 3741; amended June 27, 1997, effective June 28, 1997, 27 Pa.B. 3050; amended February 11, 2005, effective February 12, 2005, 35 Pa.B. 1197; amended July 19, 2013, effective July 20, 2013, 43 Pa.B. 4080; amended July 10, 2020, effective July 11, 2020, 50 Pa.B. 3426. Immediately preceding text appears at serial pages (388951) to (388957).

Cross References

This section cited in 25 Pa. Code § 16.51 (relating to table); 25 Pa. Code § 93.1 (relating to definitions); 25 Pa. Code § 93.4 (relating to Statewide water uses); 25 Pa. Code § 93.7 (relating to specific water quality criteria); and 25 Pa. Code § 93.9 (relating to designated water uses and water quality criteria).

§ 93.9t. Drainage List T.

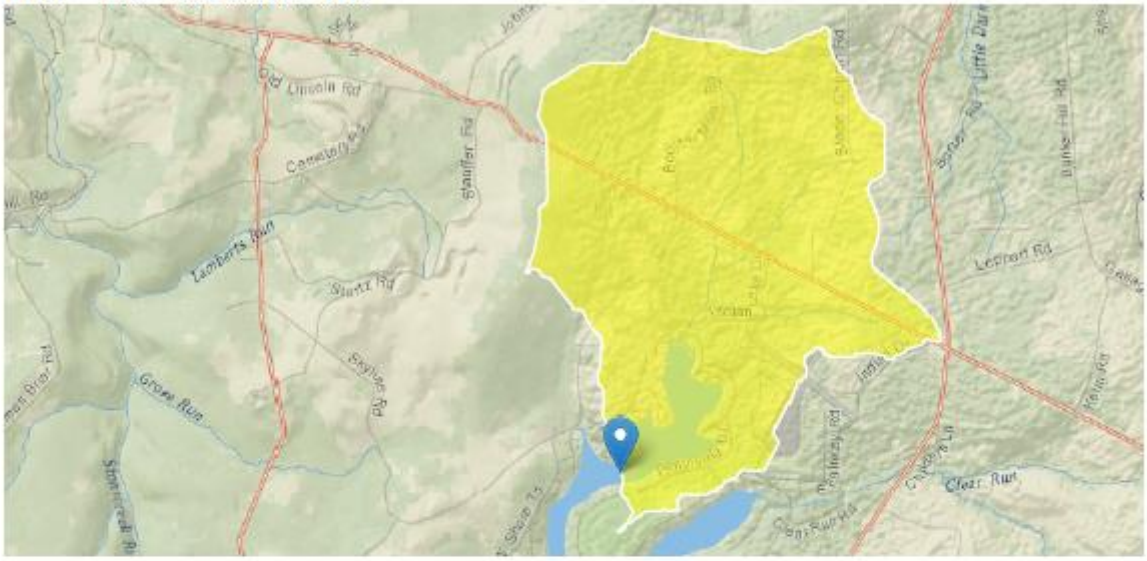
Ohio River Basin in Pennsylvania
Kiskiminetas River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
1—Ohio River				
2—Allegheny River				
3—Kiskiminetas River				
4—Conemaugh River				
5—Stony Creek	Basin, Source to Beaverdam Creek	Somerset	CWF	None
6—Beaverdam Creek	Basin	Somerset	HQ-CWF	None
5—Stony Creek	Main Stem, Beaverdam Creek to Quemahoning Creek	Somerset	TSF	None
6—Unnamed Tributaries to Stony Creek	Basins, Beaverdam Creek to Quemahoning Creek	Somerset	CWF	None
6—Oven Run	Basin	Somerset	CWF	None
6—Fallen Timber Run	Basin	Somerset	CWF	None
6—Quemahoning Creek	Main Stem	Somerset	CWF	None
7—Unnamed Tributaries to Quemahoning Creek	Basins	Somerset	CWF	None
7—Hoffman Run	Basin	Somerset	CWF	None
7—North Branch Quemahoning Creek	Main Stem	Somerset	CWF	None
8—Unnamed Tributaries to North Branch Quemahoning Creek	Basins	Somerset	CWF	None
8—Horner Run	Basin	Somerset	CWF	None

Copyright © 2020 Commonwealth of Pennsylvania

PA0254860 Raymond SRSTP

Region ID: PA
Workspace ID: PA20201204005302250000
Clicked Point (Latitude, Longitude): 40.04638, -78.86898
Time: 2020-12-03 19:56:02 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	5.44	square miles
ELEV	Mean Basin Elevation	2440	feet
PRECIP	Mean Annual Precipitation	43	inches

Low-Flow Statistics Parameters[Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	5.44	square miles	2.33	1720
ELEV	Mean Basin Elevation	2440	feet	898	2700
PRECIP	Mean Annual Precipitation	43	inches	38.7	47.9

Low-Flow Statistics Flow Report[Low Flow Region 3]

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

Statistic	Value	Unit	SE	SEp
7 Day 2 Year Low Flow	0.797	ft^3/s	43	43
30 Day 2 Year Low Flow	1.11	ft^3/s	38	38
7 Day 10 Year Low Flow	0.349	ft^3/s	54	54
30 Day 10 Year Low Flow	0.457	ft^3/s	49	49

Statistic	Value	Unit	SE	SEp
90 Day 10 Year Low Flow	0.674	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/)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.4.0