pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0233722**
Wastewater Type	**Sewage**	APS ID	**991267**
Facility Type	**SRSTP**	Authorization ID	**1269779**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Richard S. Zerby**	Facility Name	**Richard Zerby SFTF**
Applicant Address	211 Wills Hollow Road	Facility Address	211 Wills Hollow Road
	Port Matilda, PA 16870-8436		Port Matilda, PA 16870-8436
Applicant Contact	Richard Zerby	Facility Contact	Richard Zerby
Applicant Phone	(814) 692-2290	Facility Phone	(814) 692-2290
Client ID	268176	Site ID	713370
SIC Code	4952	Municipality	Worth Township
SIC Description	Trans. & Utilities - Sewerage Systems	County	Centre
Date Application Received	April 17, 2019	WQM Required	No.
Date Application Accepted	April 24, 2019	WQM App. No.	N/A.

Project Description: Application for the renewal of the existing individual NPDES SRSTP permit.

Summary of Review

Richard Zerby has submitted an application for the transfer and renewal of the existing NPDES Permit PA0233722 for the Department's review. 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.

Approve	Deny	Signatures	Date
X		Jonathan P. Peterman / Project Manager	February 10, 2020
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	40º 50' 58.64"	Longitude	-78º 3' 12.46"
Quad Name	Port Matilda	Quad Code	1221
Wastewater Description:	Sewage Effluent		
Receiving Waters	Wills Hollow (CWF)	Stream Code	23208
NHD Com ID	67180072	RMI	1.0
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	N/A	Slope (ft/ft)	N/A
Watershed No.	09C	Chapter 93 Class.	Cold Water Fishes
Existing Use	CWF	Existing Use Qualifier	N/A
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	N/A	Name	N/A
Nearest Downstream Public Water Supply Intake	PA American Water White Deer		
PWS Waters	West Branch of Susquehanna River	Flow at Intake (cfs)	682
PWS RMI	10.5	Distance from Outfall (mi)	118.1

Changes Since Last Permit Issuance: None.
Other Comments: None.

Treatment Facility Summary

Treatment Facility Name: Richard Zerby SFTF

WQM Permit No.	Issuance Date	Notes:
1408405	5/20/2009	Initial construction.

Waste Type	Degree of Treatment	Process Type	Disinfection	Design Flow (MGD)
Sewage	Tertiary	ECOFLOW Peat Filter	Ultraviolet	0.0004
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.0004	--	Not Overloaded	Anaerobic Digestion	Other WWTP

Treatment System Components:
- One (1) 1,000-Gallon septic tank.
- One (1) 500 gpd peat biofilter.
- One (1) UV Disinfection system.
- One (1) Outfall 001 to Wills Hollow.

Changes Since Last Permit Issuance: None.

TMDL Impairment

The Department's Geographic Information System (GIS) shows that Wills Hollow is not impaired and a TMDL does not exist for the stream segment. No TMDL has been taken into consideration during this review.

Chesapeake Bay Requirements

Facilities that are designed based on a flow of less than 2,000 GPD (1,000 GPD design flow for this facility) are not a part of Pennsylvania's Chesapeake Bay Tributary Strategy. Accordingly, it is not practicable to require the permittee to perform nutrient monitoring.

Anti-Backsliding

In accordance with 40 CFR 122.44(l)(1) and (2), this permit does not contain effluent limitations, standards, or conditions that are less stringent than the previous permit.

Existing Effluent Limitations and Monitoring Requirements

Existing Limits – Outfall 001

Discharge Parameter	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
	Monthly Average	Daily Maximum	Minimum	Average Monthly	Average Weekly	Instantaneous Maximum	Minimum Frequency	Sample Type
Flow (MGD)	Report						1/ Year	Estimate
$CBOD_5$				10		20	1/ Year	Grab
TSS				10		20	1/ Year	Grab
pH (Std. Units)			6.0			9.0	1/ Month	Grab
Fecal Coliforms				200 Geo Mean			1/ Year	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.0004 MGD.

Development of Effluent Limitations and Monitoring Frequencies

Outfall No. 001 **Design Flow (MGD)** 0.0004
Latitude 40º 50' 58.64" **Longitude** -78º 3' 12.46"
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
BOD_5	10	Average Monthly	125.3(a)(2)(i)	DEP SFTF Design Manual (Document 362-0300-002)
	20	IMAX		
Total Suspended Solids	10	Average Monthly	125.3(a)(2)(i)	DEP SFTF Design Manual (Document 362-0300-002)
	20	IMAX		
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform	200 / 100 ml	Geo Mean	-	92a.47(a)(4)

Water Quality-Based Limitations

The Department utilizes the WQM 7.0 v1.0b and PENTOXSD v2.0d models to establish water quality based effluent limitations. This modeling is not utilized for facilities that discharge less than 2,000 gpd. Additionally, the "TRC Spreadsheet" is not utilized for SRSTP facilities.

Best Professional Judgement (BPJ) Limitations
None.
Comments: None.

Additional Considerations
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 the abovementioned 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) and/or BPJ.

Proposed Limits - Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date

Proposed Limits – Outfall 001

Discharge Parameter	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
	Monthly Average	Daily Maximum	Minimum	Average Monthly	Average Weekly	Instantaneous Maximum	Minimum Frequency	Sample Type
Flow (MGD)	Report						1/ Year	Estimate
$CBOD_5$				10		20	1/ Year	Grab
TSS				10		20	1/ Year	Grab
pH (Std. Units)			6.0			9.0	1/ Year	Grab
Fecal Coliforms				200 Geo Mean				Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.0004 MGD.

Flow
There are no proposed changes for flow monitoring which is required by §92a.61(d)(1).

Five-Day Biochemical Oxygen Demand (BOD_5)
The limits for BOD_5 are existing technology-based effluent limits. Facilities that have been designed and built utilizing the technologies established in the *Small Flow Treatment Facilities Design Manual* (Document 362-0300-002) have been proven to continuously produce effluent with less than 10 mg/l BOD_5 and is considered best practicable control technology currently available (BPT). In accordance with current policies and procedures for facilities of this type, an effluent limit for BOD_5 will be utilized in lieu of $CBOD_5$.

Total Suspended Solids (TSS)
The limits for TSS are existing technology-based effluent limits. Facilities that have been designed and built utilizing the technologies established in the *Small Flow Treatment Facilities Design Manual* (Document 362-0300-002) have been proven to continuously produce effluent with less than 10 mg/l TSS. and is considered best practicable control technology currently available (BPT).

pH
40 CFR §133.102(c) and 25 PA Code §95.2(1) provide the basis of effluent limitations for pH. No changes are proposed for pH limitations.

Fecal Coliforms
The existing fecal coliform limits with IMAX limits were updated from the previous Chapter 92 code to correspond with what is specified in the updated 25 PA Code § 92a.47 (a)(4)&(5).

UV Disinfection
No monitoring is required for UV disinfection systems at SRSTPs

Sample Types
The sample types (grab and estimate) for all of the parameters correspond with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3 and will remain.

Monitoring Frequencies
In order to maintain consistency with other SRSTP facilities within the region, all monitoring frequencies will be required to be (1/ Year) at a minimum. In no case will "Upon Request" be utilized for monitoring of these parameters. Additionally, monitoring for pH will now be 1/ Year in lieu of 1/ Month.

Other Comments: None.

Compliance History

WMS Query Summary - A WMS Query was run at *Reports - Violations & Enforcements – Open Violations for Client Report* to determine whether there are any unresolved violations associated with the client that will affect issuance of the permit (per CSL Section 609). This query revealed that there were no unresolved violations for the existing or proposed client.

File Review / DMR's / AMR's– The last facility inspection was conducted by the Department on 6/28/18. No issues were noted in this inspection and DMR's have been submitted as required. The previous two AMR's are complete and on file.

Attachments


Zerby Map

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	PENTOXSD for Windows Model (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Toxics Screening Analysis Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☒	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
☒	Design Stream Flows, 391-2000-023, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☒	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☒	SOP: New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications
☒	Other: Small Flow Treatment Facilities Manual (362-0300-002)