

Application Type           New            
Wastewater Type           Sewage            
Facility Type           SRSTP          

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SFTF/SRSTP**

Application No.           PA0231754            
APS ID           1109140            
Authorization ID           1476228          

**Applicant, Facility and Project Information**

Applicant Name	<u>          Kailee N. Karycki          </u>	Facility Name	<u>          Karycki SFTF          </u>
Applicant Address	<u>          792 Brush Valley Road          </u> <u>          Sunbury, PA 17801-7500          </u>	Facility Address	<u>          792 Brush Valley Road          </u> <u>          Sunbury, PA 17801-7500          </u>
Applicant Contact	<u>          William Yost          </u>	Facility Contact	<u>          William Yost          </u>
Applicant Phone	<u>          570-809-2676          </u>	Facility Phone	<u>          570-809-2676          </u>
Client ID	<u>          384395          </u>	Site ID	<u>          871202          </u>
SIC Code	<u>          4952          </u>	Municipality	<u>          Rockefeller Township          </u>
SIC Description	<u>          Trans. &amp; Utilities - Sewerage Systems          </u>	County	<u>          Northumberland          </u>
Date Application Received	<u>          December 18, 2023          </u>	WQM Required	<u>          Yes          </u>
Date Application Accepted	<u>          April 22, 2024          </u>	WQM App. No.	<u>          4924401          </u>
Project Description	<u>          Installation of a SFTF with stream discharge for a guest house          </u>		

**Summary of Review**

INTRODUCTION

Kailee Karycki submitted a National Pollution Discharge Elimination System (NPDES) application which proposed the discharge of treated domestic wastewater from a small flow treatment facility (SFTF) to serve a guest residence in Rockefeller Township, Northumberland County.

See Attachment 01 for a map of the site location.

APPLICATION

Ms. Karycki submitted the National Pollution Discharge Elimination System (NPDES) Application for Individual Permit to Discharge Sewage Effluent from Small Flow Treatment Facilities (DEP #3800-PM-BCW0018b). This application was received by the Department on March 04, 2024 and was considered administratively complete on April 22, 2024. The client and site contact is William Yost, father of Karycki. His additional contact information is (email) [byost1961@gmail.com](mailto:byost1961@gmail.com).

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.

The case file, permit application package and the draft permit will be available for public review at the Department's Northcentral Regional Office. The address is 208 West Third Street, Suite 101, Williamsport, PA 17701. An appointment can be made to review these materials during the comment period by calling the file coordinator at 570-327-3636.

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Approve	Deny	Signatures		Date
X		Jeffrey J. Gocek, EIT	 Project Manager	05/06/2024
X		Nicholas W. Hartranft, PE	 Environmental Engineer Manager	05/06/2024

OUTFALL

The discharge of treated domestic wastewater from this SFTF will occur through Outfall 001. This outfall will be located at latitude 40° 49' 51.00" and longitude -76° 47' 10.34". The design flow of this SFTF will be 0.0004 MGD. The discharge will be to an Unnamed Tributary to the Susquehanna River. The nearest downstream public water supply intake is United Water Pennsylvania, located in Dauphin, PA.

Q<sub>7,10</sub> DETERMINATION

A Q<sub>7,10</sub> flow for this discharge has not been calculated since water quality modeling is not performed for residential small flow treatment facilities.

FACILITY DESCRIPTION

The SFTF will consist of a 1,000-gallon septic tank (with an effluent filter), an Ecoflo Coco filter, a UV disinfection system and an effluent pump. The Ecoflo model EC&-500-C-P-DiUV contains the filter, disinfection and effluent pump. This model is rated for 0.0005 MGD. Since it will serve a residence, this system will have an annual average design flow of 0.0004 MGD.

See Attachment 02 for the site schematic.

COMPLIANCE HISTORY

The WMS Query Open Violations by Client Report revealed no open violations for Ms. Karycki.

DEVELOPMENT OF EFFLUENT LIMITATIONSTechnology-Based Limitations

The following technology-based limitations apply to single residence sewage treatment plants (SRSTPs), subject to water quality analysis and BPJ where applicable:

Parameter	Average	IMAX	Sample Type	Frequency
Flow (GPD)	Report	XXX	Estimate	1/Year
BOD <sub>5</sub> (mg/L)	10	20	Grab	1/Year
TSS (mg/L)	10	20	Grab	1/Year
TRC (mg/L)	Report	XXX	Grab	1/Month
Fecal Coliform (No./100 mL)	200 (Annual Average)		Grab	1/Year

Water Quality-Based Limitations

In accordance with Department policy, water quality modeling using the PENTOXSD, the WQM and TRC Spreadsheet models is not performed for SRSTPs.

None are proposed.

Best Professional Judgment (BPJ) Limitations

In the absence of applicable effluent guidelines for the discharge or pollutant, permit writers must identify and/or develop needed technology-based effluent limitations (TBELs) on a case-by-case basis, in accordance with the statutory factors specified in the Clean Water Act. None are proposed.

RECEIVING STREAMStream Characteristics

The receiving stream will be an Unnamed Tributary to Susquehanna River. This stream, according to 25 PA § 93.9M, is protected for *Warm Water Fishes (WWF)* and *Migratory Fishes (MF)*. These are the streams *Designated Uses*, which is defined in 25 PA § 93.1 as "those uses specified in §§ 93.9a – 93.9z for each waterbody or segment whether or not the use is being attained". Designated uses are regulations promulgated by the Environmental Quality Board (EQB) throughout the rulemaking process. This stream currently has no *Existing Use*. Existing Use is defined in 25 PA § 93.1 as "those uses actually attained in the waterbody on or after November 28, 1975 whether or not they are included in the water quality standards".

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This Unnamed Tributary to the Susquehanna River is identified by Department stream code 18483. The stream is located in (Chapter 93) drainage list M and State Water Plan 6B (Mahanoy and Shamokin Creeks).

### Impairment

This stream is not attaining its designated uses for Aquatic Life; impaired by siltation and organic enrichment caused by agriculture. The stream is not attaining its designated uses for Recreation; impaired by pathogens from an unknown source.

Because of siltation, a Total Maximum Daily Load (TMDL) was finalized for this waterbody in 2023. A TMDL sets a ceiling on the pollutant loads that can enter a waterbody so that the waterbody will meet water quality standards. This TMDL was approved by EPA in 2023.

The low concentration of TSS discharged from this SFTF should not contribute to the impairment in the stream.

### CHESAPEAKE BAY TMDL

Nutrient monitoring requirements associated with the Chesapeake Bay TMDL do not apply since the hydraulic design flow of this SFTF is less than 2,000 gallons per day.

### SPECIAL PERMIT CONDITIONS

Annual Maintenance Form  
Discharge Monitoring Report Form  
Tank Monitoring  
Pumping Requirement  
Total Residual Chlorine Minimization  
Stormwater Prohibition  
Approval Contingencies  
Proper Waste Disposal  
Municipal Treatment Availability  
Ultraviolet Disinfection Cleaning

### SUPPLEMENTAL DISCHARGE MONITORING REPORTS

Annual Maintenance Report  
Non-Compliance Report Form  
Laboratory Accreditation Sheet

### ANNUAL MAINTENANCE REPORTS

For this permit, the operative compliance mechanism will be the Annual Maintenance Report (AMR), which is to be submitted annually. No Discharge Monitoring Reports (DMRs) will be utilized. The AMR will also be used to document maintenance activities. The results for the required 1/Year sampling of Flow, BOD5, Total Suspended Solids and Fecal Coliforms is to be reported on the AMR.

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**PROPOSED EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

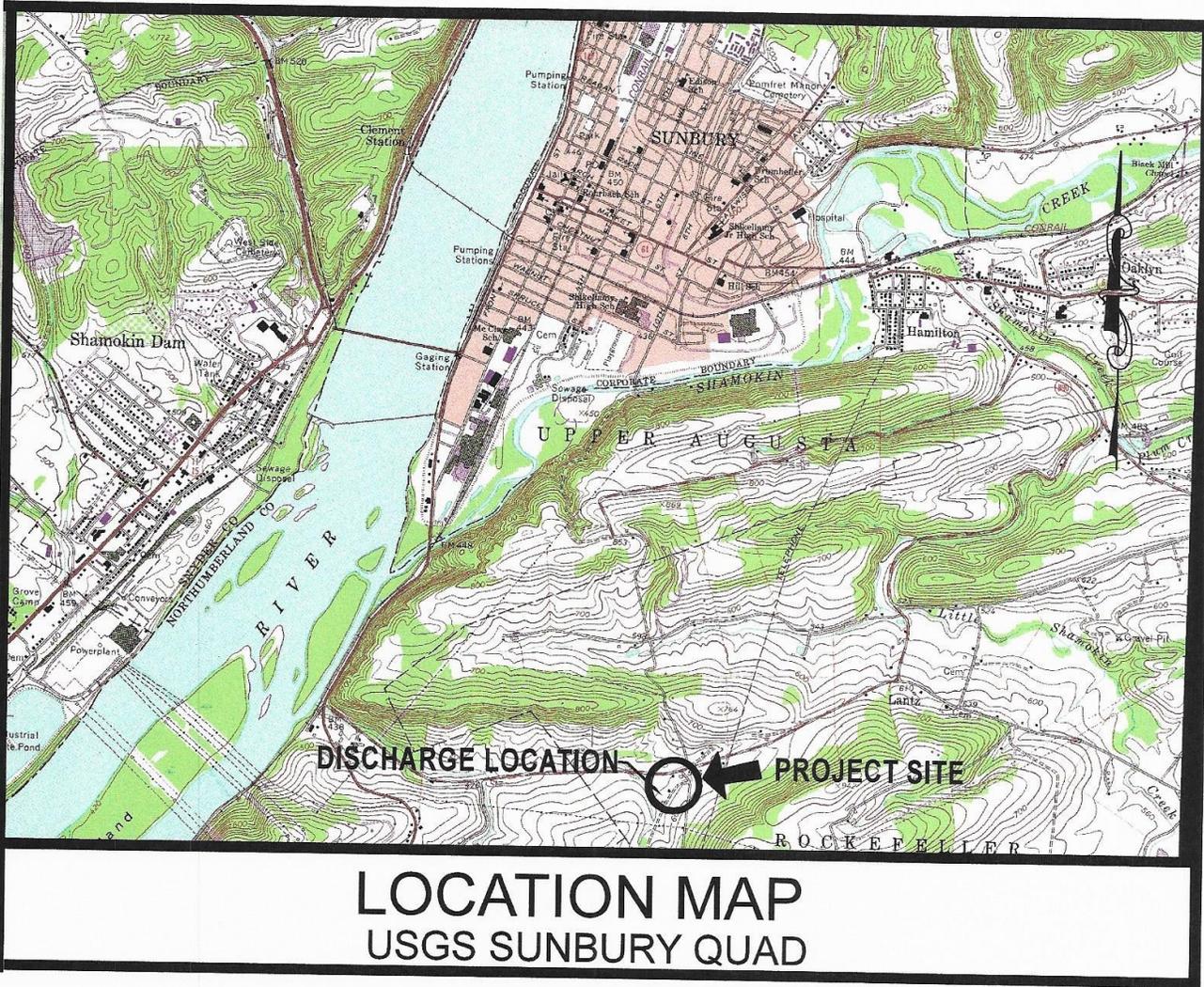
The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001) and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date

Discharge Parameter	Mass Limits (lb/day)		Concentration Limits (mg/L)				Monitoring Requirements	
	Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	IMAX	Minimum Measurement Frequency	Required Sample Type
Flow (GPD)	Report	XXX	XXX	XXX	XXX	XXX	1/Year	Estimate
BOD5	XXX	XXX	XXX	10	XXX	20	1/Year	Grab
Total Suspended Solids	XXX	XXX	XXX	10	XXX	20	1/Year	Grab
Fecal Coliform (No./100mL)	XXX	XXX	XXX	200 Annual Average	XXX	XXX	1/Year	Grab

END of Fact Sheet.

ATTACHMENT 01



ATTACHMENT 02

