

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0295221
APS ID 1094301
Authorization ID 1449953

Applicant, Facility and Project Information

Applicant Name	<u>Beth & Randy Knoll</u>	Facility Name	<u>Beth & Randy Knoll SRSTP</u>
Applicant Address	<u>1040 Townhall Road West</u> <u>Erie, PA 16509-5020</u>	Facility Address	<u>1040 Townhall Road West</u> <u>Erie, PA 16509-5020</u>
Applicant Contact	<u>Randy Knoll</u>	Facility Contact	<u></u>
Applicant Phone	<u>(814) 434-0442</u>	Facility Phone	<u></u>
Client ID	<u>379074</u>	Site ID	<u>859525</u>
SIC Code	<u>8800</u>	Municipality	<u>Summit Township</u>
SIC Description	<u>Private Households</u>	County	<u>Erie</u>
Date Application Received	<u>July 12, 2023</u>	WQM Required	<u>Pending</u>
Date Application Accepted	<u>August 15, 2023</u>	WQM App. No.	<u>2523422</u>
Project Description	<u>New discharge of treated sewage from a SRSTP</u>		

Summary of Review

This discharge is from a proposed treatment serving a four-bedroom home serving as a repair to a malfunctioning onlot system.

Existing treatment consists of a septic tank (or two) with dual compartment with minimum of 1250 gallon capacity with effluent filter, an Ecorock Biorock 600 filter, and UV disinfection. Due to this being a new alternate treatment system in Pennsylvania, increased monitoring will be placed in the permit during the first three years of the permit term to ensure the proposed effluent limits will be met using this proposed treatment.

The permittee is believed to be in compliance with the Department's rules and regulations. *No open violations in WMS as of 9/25/2023. CWY*

Sludge use and disposal description and location(s): Septage must be pumped and hauled off-site by a septage hauler for land application under a general permit authorized by DEP or disposal at a STP.

This proposed discharge does not qualify for a PAG-04 General Permit because the proposed treatment design does not conform to the Department's "Small Flow Treatment Facilities Manual."

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		Adam J. Pesek Adam J. Pesek, E.I.T. / Project Manager	September 25, 2023
X		Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	9/25/2023

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.	<u>001</u>	Design Flow (MGD)	<u>0.0005</u>
Latitude	<u>42° 2' 1.3"</u>	Longitude	<u>-80° 2' 20"</u>
Quad Name	<u>Erie South</u>	Quad Code	<u>0205</u>
Wastewater Description: <u>Domestic sewage</u>			
Receiving Waters	<u>UNT LeBoeuf Creek (TSF)</u>	Stream Code	<u>53590</u>
NHD Com ID	<u>127348367</u>	RMI	<u>0.46</u>
Drainage Area	<u></u>	Yield (cfs/mi ²)	<u></u>
Q ₇₋₁₀ Flow (cfs)	<u>0</u>	Q ₇₋₁₀ Basis	<u>Dry swale</u>
Elevation (ft)	<u>1298</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>16-A</u>	Chapter 93 Class.	<u>TSF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>FLOW REGIME MODIFICATION, SILTATION</u>		
Source(s) of Impairment	<u>NATURAL SOURCES</u>		
TMDL Status	<u></u>	Name	<u></u>
Background/Ambient Data		Data Source	
pH (SU)	<u>7.0</u>	Default	<u></u>
Temperature (°C)	<u>25</u>	Default (TSF)	<u></u>
Hardness (mg/L)	<u></u>		<u></u>
Other:	<u></u>		<u></u>
Nearest Downstream Public Water Supply Intake	<u>Cambridge Springs Borough</u>		
PWS Waters	<u>French Creek</u>	Flow at Intake (cfs)	<u>51.45</u>
PWS RMI	<u>48.35</u>	Distance from Outfall (mi)	<u>37.87</u>

Other Comments:

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 November 30, 2026.

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	Average Quarterly	Maximum	Instant. Maximum		
Flow (MGD)	Report Avg Qrtly	XXX	XXX	XXX	XXX	XXX	1/quarter	Estimate
pH (S.U.)	XXX	XXX	Report Inst Min	XXX	XXX	Report	Upon Request	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	10.0	XXX	20.0	1/quarter	Grab
Total Suspended Solids	XXX	XXX	XXX	10.0	XXX	20.0	1/quarter	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 001 (after disinfection)

Other Comments: The Ecorock Biorock 600 filter unit is reportedly capable of meeting CBOD5 averages of 10 mg/l and TSS averages of 10 mg/l.

In accordance with the SOP, no water quality modeling was performed since this is a SRSTP and UV disinfection is being used.

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Outfall 001, Effective Period: December 1, 2026 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	Estimate
pH (S.U.)	XXX	XXX	Report Inst Min	XXX	XXX	Report	Upon Request	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	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001 (after disinfection)

Other Comments: