

Application Type Renewal
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0240052
APS ID 1079381
Authorization ID 1424180

Applicant, Facility and Project Information

Applicant Name	<u>Celeste Deets</u>	Facility Name	<u>Celeste Deets SRSTP</u>
Applicant Address	<u>22980 Plank Road</u> <u>Venango, PA 16440-2030</u>	Facility Address	<u>22980 Old Plank Road</u> <u>Venango, PA 16440</u>
Applicant Contact	<u>Celeste Deets</u>	Facility Contact	<u>Celeste Deets</u>
Applicant Phone	<u>(814) 398-1427</u>	Facility Phone	<u>(814) 398-1427</u>
Client ID	<u>374753</u>	Site ID	<u>693329</u>
SIC Code	<u>8800</u>	Municipality	<u>Venango Township</u>
SIC Description	<u>Private Households</u>	County	<u>Crawford</u>
Date Application Received	<u>January 13, 2023</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>January 23, 2023</u>	WQM App. No.	<u>2007403 will be transferred concurrently</u>

Project Description Renewal of an existing NPDES Permit for an existing discharge of treated sanitary wastewater from an SRSTP. This application also transfers ownership from Renea Bailey to Celeste Deets.

Summary of Review

Act 14 - Proof of Notification was submitted and received.

The applicant should be able to meet the limits of this permit, which will protect the uses of the receiving stream.

I. OTHER REQUIREMENTS:

- | | |
|----------------------------------------------------|---------------------------------|
| A. AMRs | F. Stormwater into sewers |
| B. DMRs | G. Right of way |
| C. Depth of Septage and Scum Measurement | H. Solids handling |
| D. Septic Tank Pumping | I. Public Sewerage Availability |
| E. Effluent Chlorine Optimization and Minimization | |

SPECIAL CONDITIONS: None.

Permitted treatment consists of: One 1,250 gallon dual compartment septic tank with an effluent filter, a 500 gallon dose tank, an (WQM Permit no. 2007403) EcoFlow STB 650 peat filter, and an Ultraviolet (UV) light unit for disinfection.

It is recommended that this NPDES Permit be renewed/transferred.

There are no open violations in efacts associated with the subject Client ID (374753) as of 4/7/2023. [4/18/2023 CWY](#)

Approve	Deny	Signatures	Date
X		Stephen A. McCauley Stephen A. McCauley, E.I.T. / Environmental Engineering Specialist	4/7/2023
X		Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	4/18/2023

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.0005</u>
Latitude	<u>41° 47' 42.00"</u>	Longitude	<u>-80° 05' 56.00"</u>
Quad Name	<u>-</u>	Quad Code	<u>-</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>French Creek (WWF)</u>	Stream Code	<u>51591</u>
NHD Com ID	<u>127344590</u>	RMI	<u>47.0</u>
Drainage Area	<u>-</u>	Yield (cfs/mi ²)	<u>-</u>
Q ₇₋₁₀ Flow (cfs)	<u>-</u>	Q ₇₋₁₀ Basis	<u>-</u>
Elevation (ft)	<u>-</u>	Slope (ft/ft)	<u>-</u>
Watershed No.	<u>16-A</u>	Chapter 93 Class.	<u>WWF</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>Mercury</u>		
Source(s) of Impairment	<u>Source Unknown</u>		
TMDL Status	<u>-</u>	Name	<u>-</u>
Background/Ambient Data		Data Source	
pH (SU)	<u>-</u>		<u>-</u>
Temperature (°F)	<u>-</u>		<u>-</u>
Hardness (mg/L)	<u>-</u>		<u>-</u>
Other:	<u>-</u>		<u>-</u>
Nearest Downstream Public Water Supply Intake	<u>-</u>		
PWS Waters	<u>-</u>	Flow at Intake (cfs)	<u>-</u>
PWS RMI	<u>-</u>	Distance from Outfall (mi)	<u>-</u>

* This existing discharge flows to the French Creek, which is impaired for Mercury. Mercury is not anticipated to be discharged from this SFTF in reportable quantities so no monitoring or limits will be added with this renewal.

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.

This facility is designed as a small flow treatment facility (SFTF), but does not qualify for a PAG-04 General Permit due to the use of an EcoFlow STB 650 peat filter.

No modeling was performed since this is a renewal of an existing NPDES SRSTP Permit with technology-based limits.

Threatened and Endangered Mussel Species Concerns and Considerations

The French Creek is known to contain state and federally listed threatened and endangered mussel species. Due to the vicinity of this discharge to the French Creek, potential impacts to endangered mussel species were evaluated.

The USFWS has indicated in comment letters on other NPDES permits, that to protect threatened and endangered mussel species, wastewater discharges containing Ammonia-Nitrogen (NH₃-N), Chloride (Cl⁻), Dissolved Nickel, and Dissolved Zinc, where mussels or their habitat exist, can be no more than 1.9 mg/l, 78 mg/l, 7.3 µg/l, and 13.18 µg/l, respectively.

NPDES permits for SRSTPs do not generally include monitoring requirement for pollutants such as ammonia-nitrogen, chloride and nickel. Therefore, aside from the SRSTP treatment plant manufacturer performance data (NORWECO and others), the Department lacked sufficient data to support its assumption that a properly constructed, operated and maintained SRSTP is expected to produce an effluent that would be protective of all the uses of the receiving stream including threatened and endangered mussels. Accordingly, a sampling study was completed on 2/14/2017 by the Erie County Department of Health at the Garth Mathe SRSTP (PA0264041) located in Harborcreek Township, Erie County, Pennsylvania.

At the Garth Mathe SRSTP, Health Department staff along with DEP staff collected a sample of the discharge effluent and a sample in the small stream, where the effluent contacts and mixes with the stream. The effluent sampling result for ammonia-nitrogen (NH₃-N) was 6.52 mg/l, chloride (Cl⁻) was 121.9 mg/l, and nickel was <4.0µg/l (non-detect). The sample taken at the point which the treated effluent entered the stream had an ammonia-nitrogen (NH₃-N) concentration of 0.11 mg/l, a chloride (Cl⁻) concentration of 19 mg/l, and a nickel concentration of <4.0µg/l (non-detect).

A summary of the Garth Mathe SRSTP (PA0264041) sampling is as follows:

NPDES PERMIT NO.	PA0264041
WQM PERMIT NO.	2515406
PERMITTEE	GARTH MATHE
FACILITY NAME	GARTH MATHE SRSTP
STREET ADDRESS	3749 WILLIAMS RD
CITY	ERIE
ZIP CODE	16510
MUNICIPALITY	HARBORCREEK TOWNSHIP
COUNTY	ERIE
TREATMENT TYPE	Coco
DATE SAMPLE(S) COLLECTED	2/14/2017
EFFLUENT SAMPLING RESULTS	Sample ID: 0682 005
Ammonia-Nitrogen (NH ₃ -N)	6.52 mg/L
Chloride (Cl ⁻)	121.9 mg/L
Nickel	<4.0 µg/L
MIXING ZONE SAMPLING RESULTS	Sample ID: 0682 105
Ammonia-Nitrogen (NH ₃ -N)	0.11 mg/L
Chloride (Cl ⁻)	19 mg/L
Nickel	<4.0 µg/L

Although the existing treatment technology at the subject SRSTP (Deets) is not the same as the Mathe SRSTP, the proposed discharge from the Bailey SFTF is not expected to adversely affect threatened or endangered mussel species in the French Creek considering the expected effluent quality from the proposed wastewater treatment facility, the size of the proposed discharge, and the assimilative capacity of the French Creek once the effluent reaches it.

Similar to other SRSTPs in the DEP NWRO, no monitoring will be added with this renewal/transfer.

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	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	Upon Request	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 Annl Avg	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001, after ultraviolet (UV) light disinfection.

Flow is monitor only based on Chapter 92a.61. The limits for pH are technology-based on Chapter 93.7. The limits for BOD₅, Total Suspended Solids, and Fecal Coliforms are technology-based on Chapter 92a.47.