

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0285021
APS ID 1079525
Authorization ID 1424452

Applicant, Facility and Project Information

Applicant Name	<u>Paul Becker</u>	Facility Name	<u>Becker Properties SRSTP</u>
Applicant Address	<u>101 Greensboro Lane</u> <u>Pittsburgh, PA 15220</u>	Facility Address	<u>204 Eckert Stop Lane</u> <u>Fombell, PA 16123</u>
Applicant Contact	<u>Paul Becker</u>	Facility Contact	<u>Same as Applicant</u>
Applicant Phone	<u>(412) 965-4369</u>	Facility Phone	<u>Same as Applicant</u>
Client ID	<u>374813</u>	Site ID	<u>862283</u>
SIC Code	<u>8800</u>	Municipality	<u>Marion Township</u>
SIC Description	<u>Private Households</u>	County	<u>Beaver</u>
Date Application Received	<u>January 23, 2023</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>January 30, 2023</u>	WQM App. No.	<u>0423400</u>
Project Description	<u>Application for a new NPDES Permit for discharge of treated sewage.</u>		

Summary of Review

PA Dep received an application on January 23, 2023 proposing a 0.0004 MGD Single Residence Sewage Treatment Plant (SRSTP) to replace a malfunction on lot septic system serving a three-bedroom single-family residence.

The sewage from this facility is treated by septic tank, Ecoflow Coco Filter, and chlorine disinfection prior to discharging to Connoquenessing Creek (Id 34025), which is classified as a Warm Water Fishery (WWF) per Chapter 93 Designated Use.

Associated WQM Permit No. 042340 is also pending issuance by the department.

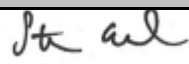

SRSTP permittees are not required to register for eDMR.

Act 14-PL 834 Municipal Notification was provided by letters sent to Marion Township and Beaver County dated December 22, 2022.

The permittee intends to utilize a certified septic tank pumping company to dispose of biosolids generated at this facility.

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		 Stephanie Conrad / Environmental Engineering Specialist	March 14, 2023
x		 Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineering Manager	March 16, 2023

Summary of Review

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 and Stream Data – 2 - Receiving Waters and PWS

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.0004</u>
Latitude	<u>40° 48' 23.13"</u>	Longitude	<u>-80° 12' 31.69"</u>
Quad Name	_____	Quad Code	_____
Wastewater Description: <u>Sewage Effluent</u>		_____	
Receiving Waters	<u>Connoquenessing Creek (WWF)</u>	Stream Code	<u>34025</u>
NHD Com ID	<u>126223591</u>	RMI	<u>0.1100</u>
Drainage Area	<u>349</u>	Yield (cfs/mi ²)	<u>0.032</u>
Q ₇₋₁₀ Flow (cfs)	<u>11.2</u>	Q ₇₋₁₀ Basis	<u>USGS Stream Stats</u>
Elevation (ft)	_____	Slope (ft/ft)	_____
Watershed No.	<u>20-C</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use	_____	Existing Use Qualifier	_____
Exceptions to Use	_____	Exceptions to Criteria	_____
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>ORGANIC ENRICHMENT</u>		
Source(s) of Impairment	<u>AGRICULTURE</u>		
TMDL Status	_____	Name	_____
Background/Ambient Data		Data Source	
pH (SU)	_____	_____	
Temperature (°F)	_____	_____	
Hardness (mg/L)	_____	_____	
Other:	_____	_____	
Nearest Downstream Public Water Supply Intake	<u>Beaver Falls Municipal Authority</u>		
PWS Waters	<u>Beaver River</u>	Flow at Intake (MGD)	<u>16.8</u>
PWS RMI	<u>5.48</u>	Distance from Outfall (mi)	<u>21.3</u>

Changes Since Last Permit Issuance: N/A- New Permit Issuance

Other Comments:

Development of Effluent Limitations

Outfall No. 001 Design Flow (MGD) 0.0004
 Latitude 40° 48' 23.13" Longitude -80° 12' 31.69"
 Wastewater Description: Sewage Effluent

Technology-Based Limitations

The following effluent limitations and monitoring requirements, at a minimum, will be established in all new and renewed SFTF permits based on the requirements of Department's Standard Operating Procedure (SOP) for *New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application* [SOP No. BCW-PMT-003 Version 1.8].

Parameter	Avg	IMAX	Sample Type	Frequency: SFTFs	Frequency: SRSTPs
Flow (GPD)	Report	XXX	Estimate (SRSTPs) Measured (SFTFs)	1/month	1/year
BOD5 (mg/L)	10	20	Grab	1/month	1/year
TSS (mg/L)	10	20	Grab	1/month	1/year
pH*	6.0 S.U. Inst. Min.	9.0 S.U.	Grab	1/month	1/year
TRC (mg/L)	Report for SRSTPs; Use TRC Spreadsheet to determine WQBELs or 0.02 mg/L for SFTFs		Grab	1/month	1/month
Fecal Coliform (No./100 ml)	200 Geometric Mean (SFTFs) / Average (SRSTPs)		Grab	1/month	1/year

* Technology-Based effluent limits for pH will be imposed based upon Federal Regulation 133.102(c) and State Regulation 95.2(1).

Connoquenessing Creek Impairment

The receiving stream, Connoquenessing Creek is impaired for organic enrichment. 25 PA Code §96.5c states that when a discharge contributes to impairment of free-flowing surface water, phosphorus shall be limited to an average monthly limit of 2.0 mg/L. Per Department's SOP for *Establishing Effluent Limitations for Individual Sewage Permits* [SOP No. BCW-PMT-033 Version 1.9], SRSTPs are generally not required to monitor for Total Nitrogen or Total Phosphorus in new and reissued permits. Because of the size of the flow, this facility is not anticipated to be a significant contributor to the nutrient impairment of Connoquenessing Creek. Annual total phosphorus monitoring will be imposed for this permit cycle. A total phosphorus limit will be re-evaluated next permit cycle based on the monitoring results.

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	Daily Maximum	Instant. Maximum		
Flow (GPD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/year	Grab
TRC	XXX	XXX	XXX	Report Avg Mo	XXX	XXX	1/month	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
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001

Other Comments: None

ATTACHMENT A
USGS Stream Stats Output

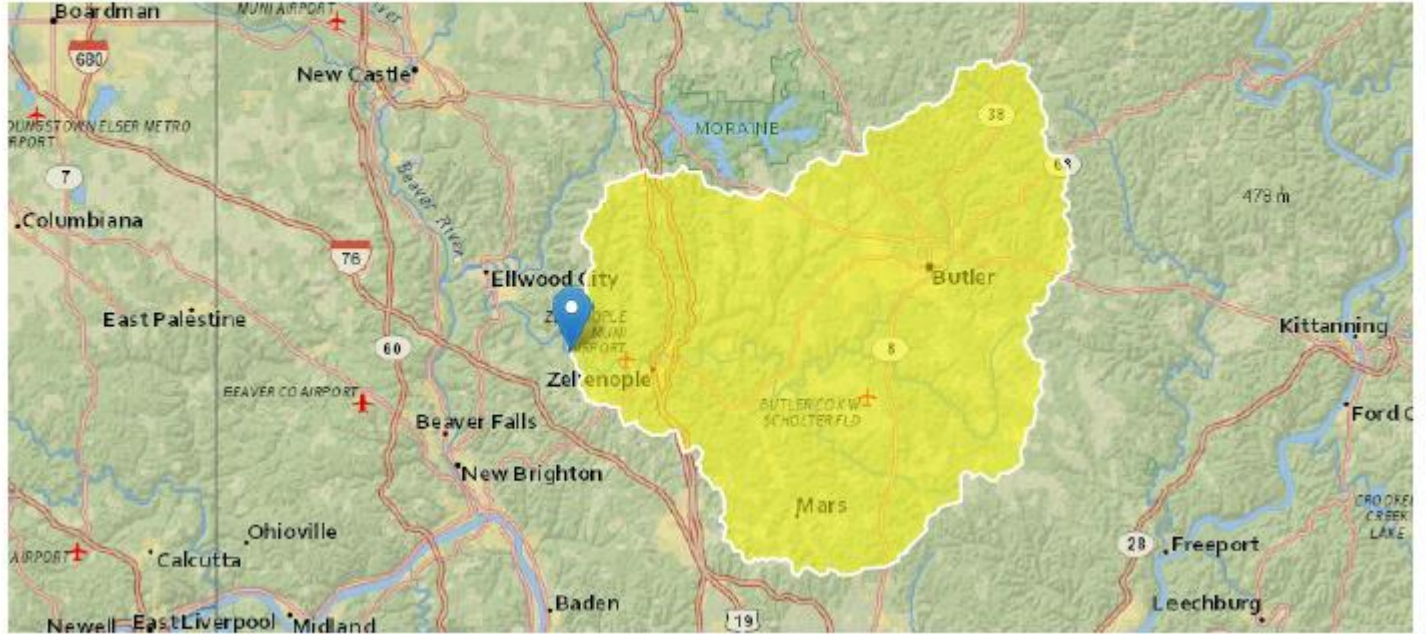
StreamStats Report

Region ID: PA

Workspace ID: PA20230307180645879000

Clicked Point (Latitude, Longitude): 40.80648, -80.20869

Time: 2023-03-07 13:07:07 -0500



➤ Low-Flow Statistics

Low-Flow Statistics Parameters [100.0 Percent (349 square miles) Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	349	square miles	2.26	1400
ELEV	Mean Basin Elevation	1192	feet	1050	2580

Low-Flow Statistics Flow Report [100.0 Percent (349 square miles) Low Flow Region 4]

PIl: Prediction Interval-Lower, Plu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	22	ft ³ /s	43	43

Statistic	Value	Unit	SE	ASEp
30 Day 2 Year Low Flow	32.3	ft ³ /s	38	38
7 Day 10 Year Low Flow	11.2	ft ³ /s	66	66
30 Day 10 Year Low Flow	15.4	ft ³ /s	54	54
90 Day 10 Year Low Flow	23.7	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/>)