

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0294080
APS ID 1087987
Authorization ID 1438792

Applicant, Facility and Project Information

Applicant Name	<u>Collin Best</u>	Facility Name	<u>Collin Best SRSTP</u>
Applicant Address	<u>492 Kreutz Creek Road</u> <u>York, PA 17406-8060</u>	Facility Address	<u>492 Kreutz Creek Road</u> <u>York, PA 17406-8060</u>
Applicant Contact	<u>Collin Best</u>	Facility Contact	<u>Collin Best</u>
Applicant Phone	<u>(717) 650-7072</u>	Facility Phone	<u>(717) 650-7072</u>
Client ID	<u>377076</u>	Site ID	<u>862287</u>
SIC Code	<u>4952</u>	Municipality	<u>Hellam Township</u>
SIC Description	<u>Trans. & Utilities - Sewerage Systems</u>	County	<u>York</u>
Date Application Received	<u>May 4, 2023</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>May 18, 2023</u>	WQM App. No.	<u>6723404</u>
Project Description	<u>. New NPDES and WQM Permits</u>		

Summary of Review

The applications for new NPDES and WQM permits were submitted for a new single residence sewage treatment plant that is proposed to serve an existing residence. This proposed facility will be located in Hellam Township, York County.

DEP has prepared this report for the applications for both NPDES and WQM permits. Based on the review outlined in this report, it is recommended that the NPDES permit be drafted and published in the Pennsylvania Bulletin for public comments for 30 days.

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.

Approve	Deny	Signatures	Date
X		<i>Aaron W. Baar</i> Aaron W. Baar / Permits Section	December 14, 2023
x		<i>Daniel W. Martin</i> Daniel W. Martin, P.E. / Environmental Engineer Manager	January 20, 2024

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>.0004</u>
Latitude	<u>40° 0' 57.10"</u>	Longitude	<u>-76° 37' 0.92"</u>
Quad Name	<u>Columbia West</u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary of Kreutz Creek (WWF, MF)</u>	Stream Code	<u>07900</u>
NHD Com ID	<u>57466233</u>	RMI	<u>0.1400</u>
Drainage Area	<u>1.43 mi²</u>	Yield (cfs/mi ²)	<u>0.144</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.206</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>506</u>	Slope (ft/ft)	<u>N/A</u>
Watershed No.	<u>7-1</u>	Chapter 93 Class.	<u>WWF, MF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u></u>		
Source(s) of Impairment	<u></u>		
TMDL Status	<u></u>	Name	<u></u>
Nearest Downstream Public Water Supply Intake	<u>Wrightsville Boro Muni Auth PADWIS Intake</u>		
PWS Waters	<u>Susquehanna River</u>	Flow at Intake (cfs)	<u>2,100 cfs (1-day, 10-year)</u>
PWS RMI	<u>43.5 miles</u>	Distance from Outfall (mi)	<u>13.4</u>

Changes Since Last Permit Issuance: None (new permit)

Other Comments: The discharge will be to an unnamed perennial tributary to Kreutz Creek. The proposed receiving water is presently attaining designated uses; the new discharge is not expected to cause an impairment.

The nearest downstream public water supply intake is Wrightsville Boro Muni Auth located on the Susquehanna River, approximately 13.4 miles from the discharge point. Considering the dilution and distance from the intake, the discharge is not expected to affect the water supply.

Treatment Facility Summary

The proposed sewage treatment plant will serve an existing single-family dwelling (400 GPD) located at 492 Kreutz Creek Road, York, PA 17406-8060. The plant will be operated and owned by Mr. Colin Best. The treatment system, per the application, will be as follows:

- Residence → 1500 gallon septic tank with Zabel-A-300 filter → Ecoflo Rotomoule EC7-500-P → DiUV Classic Disinfection Unit (Self Cleaning) → outfall to unnamed perennial tributary to Kreutz Creek

The proposed septic tank will have enough capacity to handle the proposed flows from the residence. An effluent filter will be provided at the end of the septic tank to reduce settleable and floating solids in the effluent. An Ecoflo Rotomoule EC7-500-P treatment unit will be provided following the septic tank. Information on the Premier Tech website indicates states that the Ecflo Model EC7 produces an effluent which does not exceed 10 mg/L CBOD5 and 10 mg/L TSS as monthly averages. The proposed UV disinfection will be able to provide an effluent fecal coliform concentration less than or equal to 200 cfu/100 ml. The outfall forcemain will be of 4-inch DWV Schedule 40 or better.

Based on the review of proposed designs and specifications, it is recommended that the WQM Permit be issued with standard sewage conditions. Planning for the proposed project was approved on February 9, 2023 (DEP Code No. A3-67929-238-3s)

Compliance History

Since this is a new facility, there is no history of noncompliance with permit requirements and no effluent sample results/inspections reports associated with this facility.

As of December 14, 2023, there are no open violations associated with the applicant.

Development of Effluent Limitations and Monitoring Requirements

All proposed effluent limitations and monitoring requirements are recommended by the DEPs Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003). The facility will utilize ultraviolet disinfection; therefore, a monitoring requirement for total residual chlorine is not applicable. Per SOP No. BCW-PMT-003, it is not necessary to require UV intensity or transmittance monitoring in the permit.

The permittee will be required to submit a completed Annual Maintenance Report (AMR) as a part of permit requirements. No Discharge Monitoring Report (DMR) is necessary for any facilities that are required to report effluent monitoring results on AMRs annually.

Chapter 93.4a(b) of the Department's rules and regulations require that, "existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." The discharge will be to non-special protection waters/watershed. No high-quality waters will be impacted by this discharge. No exceptional value waters will be impacted by this discharge. The receiving water is not subject to an EPA approved TMDL. All effluent limitations and monitoring requirements have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected.

Facilities that are designed based on a flow of less than 2,000 GPD are exempt from the Bay requirements. Accordingly, it is not necessary for the permittee to perform nutrient monitoring.

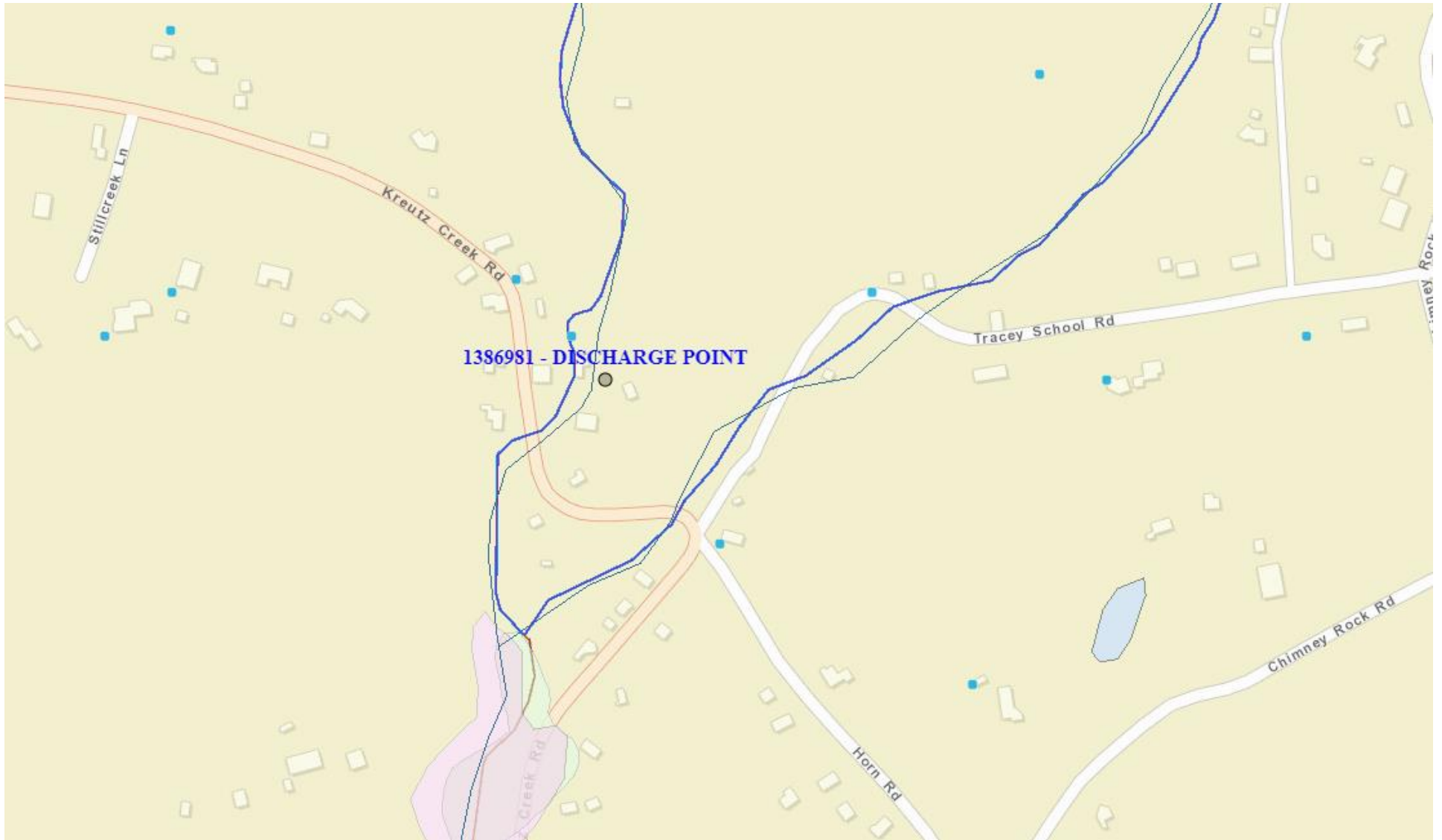
Proposed Effluent Limitations and Monitoring Requirements

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.

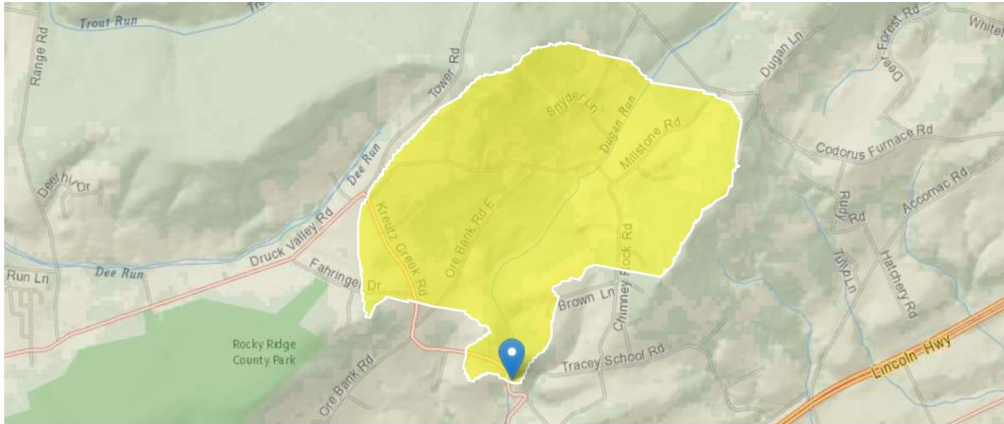
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
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	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001



StreamStats Report

Region ID: PA
 Workspace ID: PA20231214143738618000
 Clicked Point (Latitude, Longitude): 40.01580, -76.61696
 Time: 2023-12-14 09:37:59 -0500



Outfall 001

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	5.9068	degrees
DRNAREA	Area that drains to a point on a stream	1.43	square miles
ROCKDEP	Depth to rock	4.9	feet
URBAN	Percentage of basin with urban development	0.0974	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.43	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	5.9068	degrees	1.7	6.4
ROCKDEP	Depth to Rock	4.9	feet	4.13	5.21
URBAN	Percent Urban	0.0974	percent	0	89

Low-Flow Statistics Disclaimers [Low Flow Region 1]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 1]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.433	ft ³ /s
30 Day 2 Year Low Flow	0.529	ft ³ /s
7 Day 10 Year Low Flow	0.206	ft ³ /s
30 Day 10 Year Low Flow	0.262	ft ³ /s
90 Day 10 Year Low Flow	0.366	ft ³ /s

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/>)

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Application Version: 4.19.2

StreamStats Services Version: 1.2.22

NSS Services Version: 2.3.2