

Application Type Renewal
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0080918
APS ID 29742
Authorization ID 1307409

Applicant, Facility and Project Information

Applicant Name	<u>Rick Long</u>	Facility Name	<u>Long SRSTP</u>
Applicant Address	<u>101 Speedwell Forge Road</u> <u>Lititz, PA 17543-9541</u>	Facility Address	<u>101 Speedwell Forge Road</u> <u>Lititz, PA 17543-9541</u>
Applicant Contact	<u>Rick Long</u>	Facility Contact	<u>Rick Long</u>
Applicant Phone	<u>(610) 670-2591</u>	Facility Phone	<u>(610) 858-7914</u>
Client ID	<u>44566</u>	Site ID	<u>247895</u>
SIC Code	<u>4952</u>	Municipality	<u>Elizabeth Township</u>
SIC Description	<u>Trans. & Utilities - Sewerage Systems</u>	County	<u>Lancaster</u>
Date Application Received	<u>February 3, 2020</u>	WQM Required	<u>Already have existing WQM permit</u>
Date Application Accepted	<u>March 5, 2020</u>	WQM App. No.	<u></u>
Project Description	<u>NPDES Renewal.</u>		

Summary of Review

Rick Long has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of his National Pollutant Discharge Elimination System (NPDES) permit. The permit was originally issued in 1982. The existing permit was issued on August 18, 2015, and became effective on September 1, 2015, authorizing discharge of treated sewage from the Long SRSTP located in Elizabeth Township, Lancaster County into Kettle Run. The existing permit expiration date was August 31, 2020, and the permit has been administratively extended since that time.

No changes were made to the permit limitations in 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.

Approve	Deny	Signatures	Date
X		<i>Benjamin Lockwood</i> Benjamin R. Lockwood / Environmental Engineering Specialist	March 16, 2021
X		/s/ Daniel W. Martin, P.E. / Environmental Engineer Manager	March 16, 2021
X		/s/ Maria D. Bebenek, P.E. / Program Manager	March 16, 2021

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° 14' 10"</u>	Longitude	<u>76° 20' 13"</u>
Quad Name	<u>Lititz</u>	Quad Code	<u>1735</u>
Wastewater Description: <u>Treated sewage</u>			
Receiving Waters	<u>Kettle Run (HQ-CWF)</u>	Stream Code	<u>07675</u>
NHD Com ID	<u>57461707</u>	RMI	<u>0.07</u>
Drainage Area	<u>0.95 mi²</u>	Yield (cfs/mi ²)	<u>0.143</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.136</u>	Q ₇₋₁₀ Basis	<u>USGS PA StreamStats</u>
Elevation (ft)	<u>431</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>7-J</u>	Chapter 93 Class.	<u>HQ-CWF</u>
Existing Use	<u>N/A</u>	Existing Use Qualifier	<u>N/A</u>
Exceptions to Use	<u>N/A</u>	Exceptions to Criteria	<u>N/A</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>N/A</u>		
Source(s) of Impairment	<u>N/A</u>		
TMDL Status	<u>N/A</u>	Name	<u>N/A</u>
Nearest Downstream Public Water Supply Intake	<u>Lancaster City Water Bureau</u>		
PWS Waters	<u>Conestoga River</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u>26</u>

Changes Since Last Permit Issuance: None

Other Comments: USGS PA StreamStats provided a drainage area of 0.95 mi² and a Q₇₋₁₀ of 0.136 cfs.

Compliance History	
Summary of AMRs:	TRC, Fecal Coliform, CBOD ₅ , and TSS effluent limits reported in the application for the last two years were within the permitted limits. The septic tank was pumped on 6/6/2018.
Summary of Inspections:	<p>11/9/2018: A routine inspection was conducted. At the time the home was occupied by 2 residents. The treatment units consists of a septic tank, pump station, sand filter, chlorine contact tank, and outfall to Kettle Run. The septic tank had approximately 3 feet of free board. The pump tank was also inspected, which was not discharging. Solids were not visible in the tank. Trichlor tablets were being used for disinfection, and it was recommended to switch to calcium hypochlorite tablets.</p> <p>11/20/2020: An administrative review was conducted. All results reported on AMRs were within permitted limits.</p>

Other Comments: There are no open violations for the Applicant.

Existing Effluent Limitations and Monitoring Requirements

The table below summarizes the effluent limitations and monitoring requirements implemented in the existing NPDES permit.

Outfall 001

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (GPD)	Report	XXX	XXX	XXX	XXX	XXX	2/year	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/month	Grab
Total Residual Chlorine	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab
BOD5	XXX	XXX	XXX	10	XXX	20	1/year	Grab
TSS	XXX	XXX	XXX	10	XXX	20	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001

Other Comments: None

Treatment Facility Summary

This SRSTP is located in Elizabeth Township, Lancaster County. Per the previous fact sheet, it was designed and permitted to serve a single residence consisting of three bedrooms. The design flow is 400 gpd, and treated sewage will discharge to Kettle Run. The discharge to Kettle Run is less than 300 ft. from the confluence of Hammer Creek.

The facility consists of:

- Septic Tank
- Pump Tank
- Subsurface Sand Filter
- Erosion Chlorinator
- Chlorine Contact Tank
- Outfall 001 to Kettle Run

Development of Effluent Limitations

The effluent limitation and monitoring requirements are derived from the Department's Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BCW-PMT-003). According to this SOP, water quality monitoring using PentoxSD and/or WQM will not be required for SRSTPs. The existing limits for carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), Fecal Coliform, and total residual chlorine (TRC), are consistent with the limits table provided in the SOP No. BCW-PMT-003, and will remain in the permit renewal. The previous permit fact sheet required a pH limit above 6.0 and below 9.0 standard units (S.U.) according to 25 PA Code § 95.2(1). This pH permit limit will remain in the permit renewal. The SOP recommends a measurement frequency of 1/year for SRSTPs for flow reporting. Therefore the permit renewal has a modified flow reporting frequency, from 2/year to 1/year.

The facility will discharge less than 2,000 gpd and is exempt from Chesapeake Bay nutrient evaluations and requirements.

The effluent limits for this discharge 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. Exceptional Value Waters are impacted by this discharge. The discharge is to a High Quality (HQ) stream, which triggered the issuance of an Individual Permit.

The receiving stream is located on a stream segment that is designated as attaining uses. At this location there are no listed stream impairments.

No Class A Wild Trout Fisheries are impacted by this discharge.

Pursuant to 40 CFR § 122.44(l)(1), all proposed permit requirements addressed in this fact sheet are at least as stringent as the requirements implemented in the existing NPDES permit unless any exceptions addressed by DEP in this fact sheet.

Proposed Effluent Limitations and Monitoring Requirements

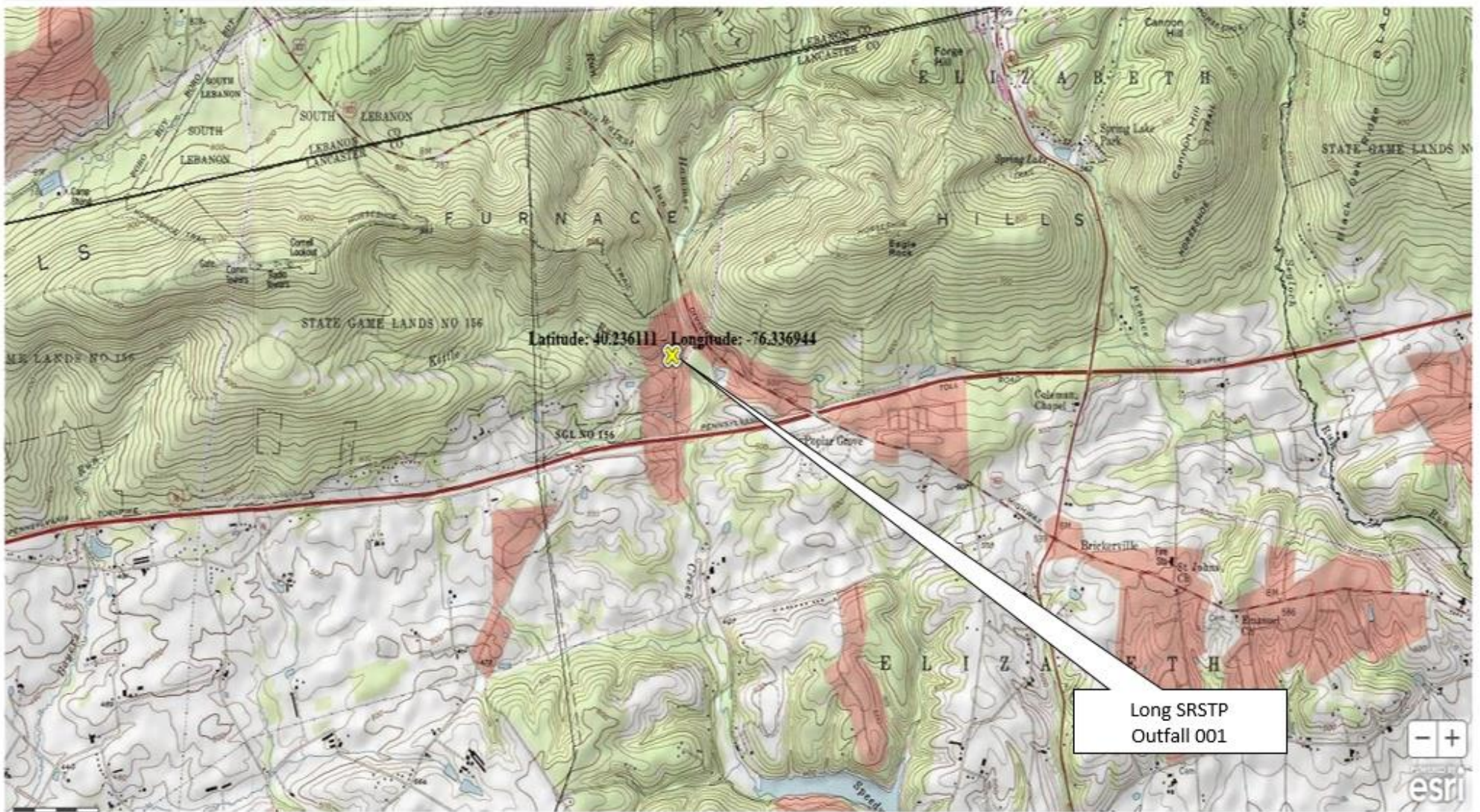
The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). 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
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
TRC	XXX	XXX	XXX	Report Avg Mo	XXX	XXX	1/month	Grab
CBOD5	XXX	XXX	XXX	10	XXX	20	1/year	Grab
TSS	XXX	XXX	XXX	10	XXX	20	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001

Other Comments: None



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Long Residence SRSTP PA0080918 Outfall 001

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Long Residence SRSTP PA0080918 Outfall 001

Region ID:

PA

Workspace ID:

PA20210312194834785000

Clicked Point (Latitude, Longitude):

40.23616, -76.33687

Time:

2021-03-12 14:48:51 -0500



Basin Characteristics			
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.95	square miles
BSLOPD	Mean basin slope measured in degrees	9.8015	degrees
ROCKDEP	Depth to rock	4.2	feet
URBAN	Percentage of basin with urban development	0	percent

Low-Flow Statistics Parameters ^(Low Flow Region 1)					
Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.95	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	9.8015	degrees	1.7	6.4
ROCKDEP	Depth to Rock	4.2	feet	4.13	5.21
URBAN	Percent Urban	0	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	0.281	ft ³ /s
30 Day 2 Year Low Flow	0.337	ft ³ /s
7 Day 10 Year Low Flow	0.136	ft ³ /s
30 Day 10 Year Low Flow	0.172	ft ³ /s
90 Day 10 Year Low Flow	0.212	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.](#)

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Application Version: 4.4.0