Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SFTF/SRSTP

Application Type	**Renewal**	Application No.	**PA0086665**
Wastewater Type	**Sewage**	APS ID	**46972**
Facility Type	**SFTF**	Authorization ID	**1467718**

Applicant, Facility and Project Information

Applicant Name	**Green Spring Brethren in Christ Church**	Facility Name	**Green Spring Brethren in Christ Church**
Applicant Address	720 Greenspring Road Newville, PA 17241-9694	Facility Address	720 Greenspring Road Newville, PA 17241-9694
Applicant Contact	Randall Smith	Facility Contact	Randall Smith
Applicant Phone	(717) 776-6077	Facility Phone	(717) 776-5647
Client ID	44711	Site ID	2270
SIC Code	4952,8661	Municipality	North Newton Township
SIC Description	Services - Religious Organizations,Trans. & Utilities - Sewerage Systems	County	Cumberland
Date Application Received	January 9, 2024	WQM Required	No.
Date Application Accepted	January 23, 2024	WQM App. No.	
Project Description	NPDES Renewal.		

Summary of Review

This report has been developed for the renewal of an NPDES permit for discharge of treated sewage from a small flow treatment facility located in North Newton Township, Cumberland County. The permit was last renewed on November 18, 2013 and became effective on December 1, 2013. The permit expired on November 30, 2018 but the terms and conditions of the permit have been extended since that time.

Based on the following review, it is recommended that the permit be drafted.

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		*Jinsu Kim* Jinsu Kim / Environmental Engineering Specialist	September 18, 2024
X		Maria D. Bebenek for Daniel W. Martin, P.E. / Environmental Engineer Manager	September 30, 2024
X		Maria D. Bebenek Maria D. Bebenek, P.E. / Program Manager	September 30, 2024

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.001
Latitude	40° 9' 24.00"	Longitude	77° 27' 1.00"
Quad Name	Newville	Quad Code	1726
Wastewater Description:	Treated Sewage		
Receiving Waters	Green Spring Creek	Stream Code	10430
NHD Com ID	56408239	RMI	1.73
Drainage Area	2.09 mi^2	Yield (cfs/mi^2)	0.1549 cfs/mi^2
Q_{7-10} Flow (cfs)	2.9 cfs (see comments below)	Q_{7-10} Basis	USGS gage 01570000
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-B	Chapter 93 Class.	CWF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired (see comments below)		
Cause(s) of Impairment	Nutrients		
Source(s) of Impairment	Agriculture		
TMDL Status	Final, 04/09/2001	Name	Conodoguinet Creek Watershed
Nearest Downstream Public Water Supply Intake	Carlisle Borough, North Middleton Township		
PWS Waters	Conodoguinet Creek	Flow at Intake (cfs)	48 cfs
PWS RMI	35.95	Distance from Outfall (mi)	24.4 miles

Changes Since Last Permit Issuance:
None; The existing Q7-10 flow, according to the 1994 protection report (prepared by Martin Ferry of DEP), was determined based on the estimated median flow from the private fish hatchery (i.e., Green Spring Trout Farms, Inc.) since the main source of water in Green Spring Creek is from this fish hatchery. Because this condition has not been changed, the existing Q7-10 will still be applied.

Based on dilution and discharge from the intake, the discharge is not expected to impact the water supply standards.

Antidegradation Requirements (25 PA Code § 93.4):
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. No High Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

Class A Wild Trout Streams:
No Class A Wild Trout Fishery is impacted by this discharge.

303d Listed Streams / Total Maximum Daily Load (TMDL):
The discharge is an impaired segment of Green Spring Creek. According to the 2024 Pennsylvania Integrated Water Quality Report (formerly 303(d) list), Green Spring Creek is impaired for nutrients from agricultural activity (see table below).

Green Spring Creek	Source	Cause	Date Listed	TMDL Date
Aquatic Life (7890) – 4.91 miles	Agriculture	Nutrients	1996	2001

TMDLs for Conodoguinet Creek watershed were developed by Tetra Tech, Inc. in December 2000 to address the impairments noted on the 303(d) list. This Conodoguinet Creek Watershed TMDL was approved by EPA on April 9, 2001. Green Spring Creek is already addressed by this TMDL and the effluent limits of this discharge have been developed to ensure that the discharge does not significantly contribute to the impairment. This approved TMDL currently does not address the wasteload allocation for point sources that discharge to Green Spring Creek; therefore, no TMDL has been taken into consideration during this review. See Appendix for current Conodoguinet Creek Watershed TMDL.

Treatment Facility Summary

The facility currently receives raw sanitary wastewater generated from the existing church (600 GPD) and the single-family residence (400 GPD) on the property. The Water Quality Management (WQM) permit was issued on November 16, 1994 (#2194405) to replace two (2) separate on-lot disposal systems with a 1,000-gallon small flow treatment system which consisted of a grease trap, septic tanks with dosing pump, a 1,500 ft^2 subsurface sand filter, a 500-gallon chlorine contact tank with tablet chlorinator, and the outfall to Green Spring Creek.

Compliance History	
Summary of DMRs:	No DMR is required for this facility given the discharge volume.
Summary of Inspections:	DEP conducted a routine inspection on July 16, 2020. No violations were identified at the time of inspection.
Other Comments:	The permittee has not had any permit violation since the last permit reissuance. There is no open violation associated with this discharge. DEP's database shows that there is no open violation associated with this permittee or facility.

Proposed Effluent Limitations and Monitoring Requirements

It is recommended that existing effluent limits be changed to reflect the requirements specified in DEP's Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003). The facility, based on previous sampling results, is capable to meeting tertiary effluent limits. TRC_CALC spreadsheet indicated that the existing BAT limits 0.5 mg/L (average monthly) and 1.6 mg/L (IMAX) are still adequate.

The sample type and monitoring frequency will remain unchanged in the permit given that the facility has not had any permit violations and the facility has been consistently discharging less than 1,000 GPD. Also, this facility serves sanitary wastewater generated from a church, which is only open one or two days per week. The TRC effluent level should be checked more frequent than other pollutants to ensure water quality protections of the receiving stream from high levels of chlorine.

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

Existing Effluent Limitations and Monitoring Requirements

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
TRC	XXX	XXX	XXX	0.5 Avg Mo	XXX	1.6	1/month	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/quarter	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/quarter	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	1000	1/quarter	Grab

Proposed Effluent Limitations and Monitoring Requirements

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Quarterly	Average Weekly	Minimum	Average Quarterly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/quarter	Estimate
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/month	Grab
CBOD5	XXX	XXX	XXX	10	XXX	20	1/quarter	Grab
TSS	XXX	XXX	XXX	10	XXX	20	1/quarter	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/quarter	Grab