pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0087106**
Wastewater Type	**Sewage**	APS ID	**46408**
Facility Type	**SFTF**	Authorization ID	**1235893**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Freedom Valley Worship Center AOG Inc.**	Facility Name	**Freedom Valley Worship Center**
Applicant Address	3185 York Road	Facility Address	3185 York Road
	Gettysburg, PA 17325-8259		Gettysburg, PA 17325-8259
Applicant Contact	Candace Pringle	Facility Contact	Candace Pringle
Applicant Phone	(717) 624-3411	Facility Phone	(717) 624-3411
Client ID	136025	Site ID	253417
SIC Code	8661	Municipality	Straban Township
SIC Description	Services - Religious Organizations	County	Adams
Date Application Received	June 29, 2018	WQM Required	No
Date Application Accepted	July 12, 2018	WQM App. No.	N/A

Project Description: NPDES permit renewal

Summary of Review

An application was received on June 29, 2018 for reissuance of a NPDES permit to discharge treated sewage from the Small Flow Treatment Facility located at 3185 York Road, Gettysburg, PA. This is located in Straban Township, Adams County. The permit was last reissued on November 21, 2013 and became effective on January 1, 2014. The permit expired on December 31, 2018.

Changes in this renewal:

- The unit of Fecal Coliform CFU/100 ml updated to No./100 ml.
- Parameters pH and DO have been eliminated from monitoring.
- The parameter BOD_5 will replace the parameter $CBOD_5$.
- The standard language in Part C Conditions for SFTFs has been updated.
- Corrected River Mile Index (RMI) from 0.08 to 0.14 mile according to eMapPA and the outfall's lat./long.

Based on the review outline in this fact sheet, it is recommended that the permit be drafted and published in Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		Hilary H. Le / Environmental Engineering Specialist	July 30, 2019
		Daniel W. Martin, P.E. / Environmental Engineer Manager	
		Maria D. Bebenek, P.E. / Clean Water Program Manager	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.002
Latitude	39º 51' 32.00"	Longitude	-77º 8' 0.02"
Quad Name	Gettysburg	Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Swift Run	Stream Code	08960
NHD Com ID	57474017	RMI	0.1400 mile
Drainage Area	0.27 mi^2	Yield (cfs/mi^2)	0.0074 (cfs/mi^2)
Q_{7-10} Flow (cfs)	0.00208 cfs	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	577.2 ft	Slope (ft/ft)	
Watershed No.	07F	Chapter 93 Class.	WWF & MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	**N/A**		
Source(s) of Impairment	**N/A**		
TMDL Status	**N/A**	Name	**N/A**
Nearest Downstream Public Water Supply Intake	Wrightsville Water Supply Company		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	12.63 miles	Distance from Outfall (mi)	69.4 miles

Changes Since Last Permit Issuance: None

Drainage Area:
The discharge is to the headwater of Unnamed Tributary 08960 to Swift Run at RMI 0.14 mile. A drainage area of the point of discharge is estimated to be 0.27 sq. miles according to USGS StreamStats available at https://streamstats.usgs.gov/ss/.

Streamflow:
USGS StreamStats produces a Q7-10 0.00208 cfs at the point of discharge.

Unnamed Tributary 08960 to Swift Run:
Under 25 Pa Code § 93.9o, all unnamed tributary to Swift Run are designated as warm water and migratory fishes. No special protection water(s) is therefore impacted by this discharge. DEP's latest integrated report prepared in 2016 showed Swift Run is not impaired and the discharge is located in a stream segment listed as attaining uses.

Public Water Supply Intake:
The fact sheet prepared for the renewal permit indicated that the nearest downstream public water supply intake is Wrightsville Water Supply Company located on Susquehanna River, approximately 69.4 miles from the discharge. Considering downstream distance and dilution, the discharge is not expected to impact the water supply.

Compliance History	
Summary of DMRs:	DMRs have been consistently submitted to DEP.
Summary of Inspections:	DEP conducted the last inspection in 2018. No violations were noted at the time of inspection.
Other Comments:	A file review reveals that there are currently no open violations associated with this facility or permittee. Since the last permit renewal, no permit violations have been identified by DEP.

Compliance History

The AMR data reports from 1/2014 to 5/2015 are summarized in the Table below.

	UV Cleaning	BOD_5 (mg/L)	pH (S.U.)	TSS (mg/L)	Fecal Coliform (CFU/100 ml)
1/2014	1/1 & 1/29/14	8	8.1	11	2
2/2014	2/19/14	3	8.2	1	1
3/2014	3/25/14	7	7.9	15	48
4/2014		9	8.2	24	11
5/2014	5/18/14	12	7.9	24	6
6/2014	6/1/14	3	8.0	7	< 1
7/2014	7/7 & 7/31/14	< 3	7.8	1	< 1
8/2014	8/27/14	> 3	7.5	2	< 1
9/2014		3	7.1	2	< 1
10/2014		< 3	7.1	1	< 1
11/2014	11/29/14	< 3	6.6	7	< 1
12/2014		< 3	7.4	1	< 2
1/2015	1/12/15	4	7.7	8	< 1
2/2015		5	7.1	2	< 2
3/2015		5	7.0	2	6
4/2015		5	7.3	1	< 10
5/2015		< 3	6.9	1	12

DMR Data for Outfall 001 (from January 1, 2017 to December 31, 2017) are summarized in the Table below.

Parameter	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17	Oct 17	Nov 17	Dec 17
Flow (MGD) Average Monthly	0.0005	0.0005	0.0005	0.0006	0.0008	0.0004	0.0004	0.0006	0.0006	0.0006	0.0005	0.0004
Flow (MGD) Daily Maximum	0.0007	0.001	0.001	0.0024	0.011	0.0032	0.0011	0.0033	0.0015	0.0017	0.002	0.0012
pH (S.U.) Minimum	7.6	8.1	7.6	7.8	7.5	7.6	7.9	7.4	7.4	7.4	6.7	7.5
D.O. (mg/L) Minimum	9.7	8.4	9.0	8.2	7.3	7.2	7.1	7.1	8.5	7.1	7.9	7.7
Fecal Coliform (CFU/100 ml) Geo Mean	< 1	< 2	6	8	< 2	< 2	< 2	< 2	22	< 1	< 2	< 1
TSS (mg/L) Average Monthly	1	5	3	1	4	1	1	1	1	2	1	1
BOD_5 (mg/L) Average Monthly	3	5	3	< 3	3	< 3	< 3	< 3	3	< 3	< 3	< 3
NH_3-N (mg/L) Average Monthly	< 0.10	0.27	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Sample Results (Renewal Application)

Parameter	Average Daily	Average Monthly
pH minimum (S.U.)	6.7	
pH maximum (S.U.)	8.1	
$CBOD_5$ (mg/L)		3
Fecal Coliform (No./100 ml)		22
TSS (mg/L)		2

Treatment Facility Summary

The facility serves church services, staff within an office building, and a school building. The Water Quality Management (WQM) permit was originally issued on July 31, 2000 (#0100403) for a 1,000-gallon equalization tank, a Norweco aeration tank which consisted of pretreatment, aeration and settling chambers with an effluent filter; two (2) sand filters, one UV disinfection chamber, and an outfall. Since this old treatment system was not able to handle the increased flow, the WQM permit was amended in July 2005 to double the capacity of the existing facility (#0100403 05-1). The facility now consists of bar screen, equalization tank, two-compartment aeration tank, clarifier, post aeration tank, filter dosing tank, two sand filters, two (2) UV disinfection units, sludge holding tank, and an outfall.

Development of Effluent Limitations and Monitoring Requirements

pH is no longer a parameter of concern for SFTPs, so the pH monitoring requirement in the previous permit has been eliminated.

Dissolved Oxygen (DO) is no longer a parameter of concern for SFTPs, so the DO monitoring requirement in the previous permit has been eliminated.

The reviewer has determined that no other changes to the proposed limits and/or sampling frequencies are necessary at this time.

The reviewer notes that the existing $CBOD_5$ and TSS monitoring frequencies and limits are inconsistent with the monitoring frequencies and limits recommended in DEP SOP No. BPNPSM-PMT-003 for SFTPs. A review of the facility's DMRs and a review of the technology on site both verify that the existing facility can meet the more stringent limits in the SOP without upgrading the existing facility. The monitoring frequencies and limits from the previous permit will remain the same. Also, because the SOP, and pre-printed AMR form all specify BOD_5 instead of the parameter $CBOD_5$, then the BOD_5 has replaced the parameter $CBOD_5$.

The SOP does not require the permittee to monitor Ammonia-Nitrogen (NH_3-N). However, as per anti-backsliding policy, monitoring for this parameter will remain in the permit. Since no additional monitoring is required, the existing NH_3-N limit will remain in the permit. The permittee is currently meeting the existing NH_3-N limit of 6.0 mg/L.

For Flow, it is not necessary to perform daily maximum monitoring since the treated effluent is less than 2,000 GPD. The permit is included a non-seasonal fecal coliform limit of 200/ 100 mL which more stringent than the seasonal fecal limits (200 / 100 mL for summer; and 10,000/ 100 mL for winter). The reviewer notes that the frequency of sampling for Flow, and Fecal Coliform are recommended to remain the same as the existing permit.

The proposed monitoring frequencies for all parameters are recommended by Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications revised on May 17, 2019. This is also recommended by Table 6-3 of the permit manual, Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (362-0400-001/Chapter 6/Page 10). Since there have been no significant compliance issues with effluent, then no changes to the proposed limits and/or sampling frequencies are necessary at this time.

Since the AMR data reported from permit effective date through permit effective date + 6 months were compliant, and the renewal application submitted to DEP on 6/29/2018 indicated no change since last renewal permit; then the reviewer recommended the proposed permit will eliminate the interim requirements.

Chesapeake Bay Requirements

No nutrient monitoring requirement is recommended for this facility. Facilities that are designed based on a flow of less than or equal to 2,000 GPD or considered as SRSTPs are exempt from the Bay requirements.

Total Maximum Daily Load (TMDL)
The discharge is located in a stream segment listed as attaining uses; therefore, no TMDL has been taken into consideration during this review.

Antidegradation Requirements
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.

Other Considerations
No Class A Wild Trout Fishery is impacted by this discharge. Considering dilution and distance from the intake, the discharge is not expected to affect the water supply.

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 Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/month	Grab
Dissolved Oxygen	XXX	XXX	5.0	XXX	XXX	XXX	1/month	Grab
$CBOD_5$	XXX	XXX	XXX	10	XXX	20	1/month	Grab
TSS	XXX	XXX	XXX	10	XXX	20	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	18	XXX	36	1/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	6.0	XXX	12	1/month	Grab

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/month	Measured
BOD_5	XXX	XXX	XXX	10	XXX	20	1/month	Grab
TSS	XXX	XXX	XXX	10	XXX	20	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	18	XXX	36	1/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	6.0	XXX	12	1/month	Grab

Compliance Sampling Location:

Other Comments:

This is a topographic of the facility.