

Application Type New  
Wastewater Type Sewage  
Facility Type SRSTP

**NPDES/WQG-01 PERMIT FACT SHEET  
INDIVIDUAL SFTF/SRSTP**

Application No. PA0266981 &  
WQG01671902  
APS ID 998926  
Authorization ID 1283037 &  
1283039-WQG-01

**Applicant, Facility and Project Information**

Applicant Name	<u>Ryan P. Renard</u>	Facility Name	<u>Renard Residence</u>
Applicant Address	<u>350 Mount Zion Road</u> <u>Dillsburg, PA 17019-8900</u>	Facility Address	<u>Franklin Church Road</u> <u>Dillsburg, PA 17019</u>
Applicant Contact	<u>Ryan Renard</u>	Facility Contact	<u>Ryan Renard</u>
Applicant Phone	<u>(717) 525-2624</u>	Facility Phone	<u>(717) 525-2624</u>
Client ID	<u>351674</u>	Site ID	<u>838050</u>
SIC Code	<u>8811</u>	Municipality	<u>Franklin Township</u>
SIC Description	<u>Services - Private Households</u>	County	<u>York</u>
Date Application Received	<u>August 2, 2019</u>	WQM Required	<u></u>
Date Application Accepted	<u>August 7, 2019</u>	WQM App. No.	<u>WQG01671902</u>
Project Description	<u>NPDES and WQG-01 permits applications for a new SRSTP.</u>		

**Summary of Review**

This fact sheet supports the issuance of new NPDES for Individual and WQG-01 permits for discharge of treated sewage from the single residence sewage treatment plant (SRSTP) located in Franklin Township, York County. DEP received a new NPDES for Individual and WQG-01 permit applications on August 2, 2019 prepared by Diffenbaugh Wadel, Inc. The discharge will be to North Branch Bermudian Creek which is classified as warm water and migratory fishes (WWF & MF).

DEP has prepared this report for the applications for both NPDES and WQG-01 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		Hilary H. Le / Environmental Engineering Specialist	August 23, 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.	<u>001</u>	Design Flow (MGD)	<u>0.0004</u>
Latitude	<u>40° 3' 34.99"</u>	Longitude	<u>-77° 3' 36.50"</u>
Quad Name	<u>Dillsburg</u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>North Branch Bermudian Creek (WWF, MF)</u>	Stream Code	<u>8640</u>
NHD Com ID	<u>57467037</u>	RMI	<u>0.2300</u>
Drainage Area	<u>8.09 mi.<sup>2</sup></u>	Yield (cfs/mi. <sup>2</sup> )	<u>0.09 cfs/mi.<sup>2</sup></u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.725</u>	Q <sub>7-10</sub> Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>486.8</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>07-F</u>	Chapter 93 Class.	<u>Warm Water Fishes, Migratory Fishes</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>NUTRIENTS</u>		
Source(s) of Impairment	<u>AGRICULTURE</u>		
TMDL Status	<u></u>	Name	<u></u>
Nearest Downstream Public Water Supply Intake	<u>Wrightsville Borough Municipal Authority, York County</u>		
PWS Waters	<u>Susquehanna River</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>28.5 miles</u>	Distance from Outfall (mi)	<u>Approximate 56 miles</u>

Changes Since Last Permit Issuance: none, it is a new permit.

**Drainage Area/Stream Flows:**

The discharge will be to Unnamed Tributary North Branch Bermudian Creek at 0.23 RMI. A drainage area upstream of the point of proposed discharge is estimated to be 8.09 mi.<sup>2</sup>, according to USGS StreamStats available at <https://streamstats.usgs.gov/ss/>. USGS StreamStats also produced a Q<sub>7-10</sub> flow of 0.725 cfs at the point of proposed discharge.

**North Branch Bermudian Creek**

Under 25 Pa Code §93.9o, North Branch Bermudian Creek is designated as warm-water and migratory fishes. The North Branch Bermudian Creek is currently impaired for nutrients as a result of agriculture. TMDLs have not been developed to address these impairments.

**Public Water Supply Intake**

According to DEP's eMapPA available at <http://www.depgis.state.pa.us/emappa/>, the nearest downstream public water supply intake is Wrightsville Borough Municipal Authority, York County located on Susquehanna River, approximately 56 miles from the point of proposed discharge. Given the nature and distance, the proposed discharge is not expected to impact the water supply.

### Treatment Facility Summary

The facility is proposed to serve the 3-bedroom single family residence and will discharge up to 400 gallons per day of treated effluent to North Branch Bermudian Creek, located at 350 Mount Zion Road, Dillsburg, PA 17019. The facility will be owned and maintained by Ryan Renard. The proposed treatment process, according to the application, is as follows:

1,250-gal Multi-Compartment Septic Tank → ECOFLO Coco filter EC7-1050 → Salcor 3G UV Disinfection Unit → Outfall

The proposed septic tank will have enough capacity to handle the proposed design flow. An effluent filter will be provided at the end of the septic tank to reduce settleable and floatable solids in the effluent. An ECOFLO Coco filter EC7-1050 will be provided, which has been demonstrated to produce effluent that does not exceed 10 mg/L BOD<sub>5</sub> and 10 mg/L TSS. The proposed UV disinfection system will be able to provide an effluent fecal coliform concentration less than or equal to 200 No./100 mL.

The primary treatment tank sludge levels will be monitored yearly and pumped out no longer than 3-year intervals. The outlet of the tank will have an effluent filter, preventing solids from leaving the tank. The UV unit will be accessible from the ground surface, allowing the UV bulb to be replaced or cleaned. The UV unit has an alarm-light system to alert for a treatment malfunction, and one or more spare bulbs will be kept on site for emergency replacement.

### Compliance History

On July 16, 2019, DEP approved the Act 537 planning as a revision to the Act 537 official sewage facilities plan of Franklin Township (DEP Code No. A3-67923-313-3s).

This is a new facility; therefore, there are no effluent sample results / inspection reports associated with this facility. The Department's database indicates that there is currently no open violation associated with the facility or the applicant.

### Development of Effluent Limitations and Monitoring Requirements

The effluent limitations and monitoring requirements are derived from DEP's Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003, revised May 17, 2019). Since the facility will utilize ultraviolet (UV) disinfection, monitoring requirements for total residual chlorine are not applicable. According to the SOP referenced above, water quality monitoring using PentoxSD and/or WQG-01 are not required for SRSTPs. The permittee will be required to submit a completed Annual Maintenance Report (AMR) as part of the permit requirements. No DMR is necessary for any facilities that are required to report effluent monitoring results on AMRs annually.

The draft permit will include the following Part C conditions:

- a. Small Flow Treatment Facility Maintenance, including measurement of the depth of septage and scum, 3-year septic tank pumping requirement, reporting requirement of a completed Annual Maintenance Form.
- b. Stormwater Prohibition
- c. Property Rights
- d. Proper Disposal of Solids

**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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> 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
BOD <sub>5</sub>	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: 001

Other Comments:

This is a topographic of the facility.

