

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application Nos. PA0266973 &
WQM 3119401
APS ID 998384
Authorization IDs 1282118 &
WQM: 1282124

Applicant, Facility and Project Information

Applicant Name	<u> Karen L. Johnson </u>	Facility Name	<u> Karen Johnson Properties </u>
Applicant Address	<u> 11531 Johnson Acres Lane </u> <u> Hesston, PA 16647 </u>	Facility Address	<u> 11882 & 11892 Redstone Ridge Road </u> <u> Hesston, PA 16647 </u>
Applicant Contact	<u> Karen Johnson </u>	Facility Contact	<u> Jennie Johnson </u>
Applicant Phone	<u> </u>	Facility Phone	<u> (814) 627-4259 </u>
Client ID	<u> 351487 </u>	Site ID	<u> 831657 </u>
SIC Code	<u> 8811 </u>	Municipality	<u> Walker Township </u>
SIC Description	<u> Services - Private Households </u>	County	<u> Huntingdon </u>
Date Application Received	<u> July 30, 2019 </u>	WQM Required	<u> </u>
Date Application Accepted	<u> July 30, 2019 </u>	WQM App. No.	<u> 3119401 </u>
Project Description	<u> NPDES and WQM permits applications for a new SRSTP. </u>		

Summary of Review

This fact sheet supports the issuance of new NPDES and WQM permits for discharge of treated sewage from the single residence sewage treatment plant (SRSTP) located in Walker Township, Huntingdon County. Since DEP is unable to issue the NPDES General Permit PAG-04 until further notice, then the permittee submitted a NPDES application for an Individual SFTF/SRSTP to replace General Permit PAG-04 application. DEP received a new NPDES for Individual and WQM permit applications on July 30, 2019 prepared by GHD, Inc.

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		Hilary H. Le / Environmental Engineering Specialist	August 9, 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>0.0008</u>
Latitude	<u>40° 26' 31.09"</u>	Longitude	<u>-78° 6' 49.12"</u>
Quad Name	<u>Huntingdon</u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary of Crooked Creek (WWF, MF)</u>	Stream Code	<u>15535</u>
NHD Com ID	<u>65608202</u>	RMI	<u>1.87 miles</u>
Drainage Area	<u>0.11 mi²</u>	Yield (cfs/mi ²)	<u>0.004 cfs/mi²</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.0004 cfs</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>802.55</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>11-B</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>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>Mifflintown Municipal Authority, Milford Township</u>		
PWS Waters	<u>Juniata River</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>34.4 miles</u>	Distance from Outfall (mi)	<u>Approximate 68 miles</u>

Drainage Area/Stream Flows:

The discharge will be to Unnamed Tributary 15535 to Crooked Creek at 1.87 RMI. A drainage area upstream of the point of proposed discharge is estimated to be 0.11 mi.², according to USGS StreamStats available at <https://streamstats.usgs.gov/ss/>. USGS StreamStats also produced a Q₇₋₁₀ flow of 0.0004 cfs at the point of proposed discharge.

Unnamed Tributary to Crooked Creek

Under 25 Pa Code §93.9n, Unnamed Tributary to Crooked Creek is designated as Warm-Water & Migratory Fishes (WWF & MF), and attaining its uses. No TMDL has been developed yet to address this impairment. Crooked Creek does not support a Class A Wild Trout fishery. Therefore, no Class A Wild Trout fishery is impacted by this discharge.

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 Mifflintown Municipal Authority, Milford Township located on Juniata River, approximately 68 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 two (2) 3-bedroom single family residences and will discharge 800 gallons per day of treated effluent to Unnamed Tributary 15535 to Crooked Creek, located at 11882 & 11892 Redstone Ridge Road, Hesston, PA 16647. The facilities will be owned and maintained by Karen L. Johnson. The proposed treatment process, according to the application, is as follows:

Two (2) 1,000-gallon two (2)-compartment septic tanks with Polylock PL-122 filter → a 1,000-gallon dosing tank → 400 square foot subsurface sand filter → Norweco Model At 1500 UV disinfection system → outfall 001 to Unnamed Tributary 15535 to Crooked Creek.

The proposed septic tank will have enough capacity to handle the proposed design flow. According to the generally designed requirements for small flow treatment facilities manual (Technical Guidance Number 362-0300-002) the effluent BOD₅ and TSS concentration levels will achieve 10 mg/L or less. The proposed UV disinfection will be able to provide an effluent fecal coliform concentration less than or equal to 200 No./100 ml. The outfall line will be of 4-inch PVC.

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 subsurface sand filter will be inspected annually. 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 February 25, 2019, DEP approved the Act 537 planning as a revision to the Act 537 official sewage facilities plan of Walker Township (DEP Code No. A3-31945-077-3s).

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 WQM 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) ⁽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
BOD ₅	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.

