

Application Type Renewal
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0248053
APS ID 861529
Authorization ID 1323122

Applicant, Facility and Project Information

Applicant Name	<u>Brandon M. Arter</u>	Facility Name	<u>Brandon Arter SRSTP</u>
Applicant Address	<u>114 Oak Tree Road</u> <u>Manheim, PA 17545</u>	Facility Address	<u>114 Oak Tree Road</u> <u>Manheim, PA 17545</u>
Applicant Contact	<u>Brandon Arter</u>	Facility Contact	<u>Brandon Arter</u>
Applicant Phone	<u>(717) 682-0117</u>	Facility Phone	<u>(717) 682-0117</u>
Client ID	<u>316910</u>	Site ID	<u>663165</u>
SIC Code	<u>8811</u>	Municipality	<u>Rapho Township</u>
SIC Description	<u>Services - Private Households</u>	County	<u>Lancaster</u>
Date Application Received	<u>August 11, 2020</u>	WQM Required	<u>No</u>
Date Application Accepted	<u>September 16, 2020</u>	WQM App. No.	<u></u>
Project Description	<u>NPDES Renewal.</u>		

Summary of Review

Brandon Arter has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of his National Pollutant Discharge Elimination System (NPDES) permit. The existing permit was issued on January 27, 2016, and became effective on February 1, 2016, authorizing discharge of treated sewage from the Arter SRSTP located in Rapho Township, Lancaster County into Rife Run. The existing permit expiration date was January 31, 2021, 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		Benjamin R. Lockwood Benjamin R. Lockwood / Environmental Engineering Specialist	August 19, 2021
X		Maria D. Bebenek for Daniel W. Martin, P.E. / Environmental Engineer Manager	August 27, 2021
X		Maria D. Bebenek Maria D. Bebenek, P.E. / Program Manager	August 27, 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° 11' 48"</u>	Longitude	<u>76° 25' 24"</u>
Quad Name	<u>Manheim</u>	Quad Code	<u>1734</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Rife Run (WWF)</u>	Stream Code	<u>NA</u>
NHD Com ID	<u>57462319</u>	RMI	<u>0.52</u>
Drainage Area	<u>0.05 mi²</u>	Yield (cfs/mi ²)	<u>0.0038</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.00019</u>	Q ₇₋₁₀ Basis	<u>USGS PA StreamStats</u>
Elevation (ft)	<u>503</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>7-G</u>	Chapter 93 Class.	<u>WWF</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>Impaired</u>		
Cause(s) of Impairment	<u>Pathogens, Siltation, Siltation</u>		
Source(s) of Impairment	<u>Source Unknown, Agriculture, Urban Runoff/Storm Sewers</u>		
TMDL Status	<u>N/A</u>	Name	<u>N/A</u>
Nearest Downstream Public Water Supply Intake	<u>Manheim Borough Authority</u>		
PWS Waters	<u>Rife Run</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>1.0</u>	Distance from Outfall (mi)	<u>2.0</u>

Changes Since Last Permit Issuance: None

Other Comments: USGS PA StreamStats provided a drainage area of 0.05 mi² and a Q₇₋₁₀ of 0.00019 cfs.

Compliance History	
Summary of DMRs:	Effluent limits reported in the application for the last two years were within the permitted limits. The septic tank was pumped on 12/29/2017.
Summary of Inspections:	4/27/2020: An administrative review of AMRs was conducted. It was recommended that yearly samples be collected and reported on AMRs. 11/19/2020: An administrative review of AMRs was conducted. It was again recommended to collect yearly samples and report them on AMRs.

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	Daily Maximum	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (GPD)	Report	Report	XXX	XXX	XXX	XXX	1/year	Estimate
Total Residual Chlorine	XXX	XXX	XXX	Report	XXX	Report	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 (CFU/100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	200	1/year	Grab

Compliance Sampling Location: At discharge from chlorine contact tank

Other Comments: None

Treatment Facility Summary

This SRSTP is located in Rapho Township, Lancaster County. Per the previous fact sheet, it was designed and permitted to serve a single family residence with a design flow of 0.0004 mgd. Per the previous fact sheet, the facility consists of a 500 gpd aerobic unit (total volume of 1,469 gallons with 548 gallons equalization/pretreatment, 663 gallon aeration, 258 gallon final clarifier), a 500 gallon dosing tank, a 92 ft² sand filter, tablet chlorinator and a 500 gallon chlorine contact tank, and discharge to an UNT of Rife Run. A point of first use survey was performed on April 7, 2005. The survey determined that the point of first use was at the point of discharge.

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 requirements for flow, 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 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. No High Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

The receiving stream is located on a stream segment that is impaired. There is a recreational impairment due to pathogens from an unknown source. There is an aquatic life impairment due to siltation from agriculture and urban runoff/storm sewers. There is an existing limit for fecal coliform, and the discharge will not contribute to the siltation impairment.

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

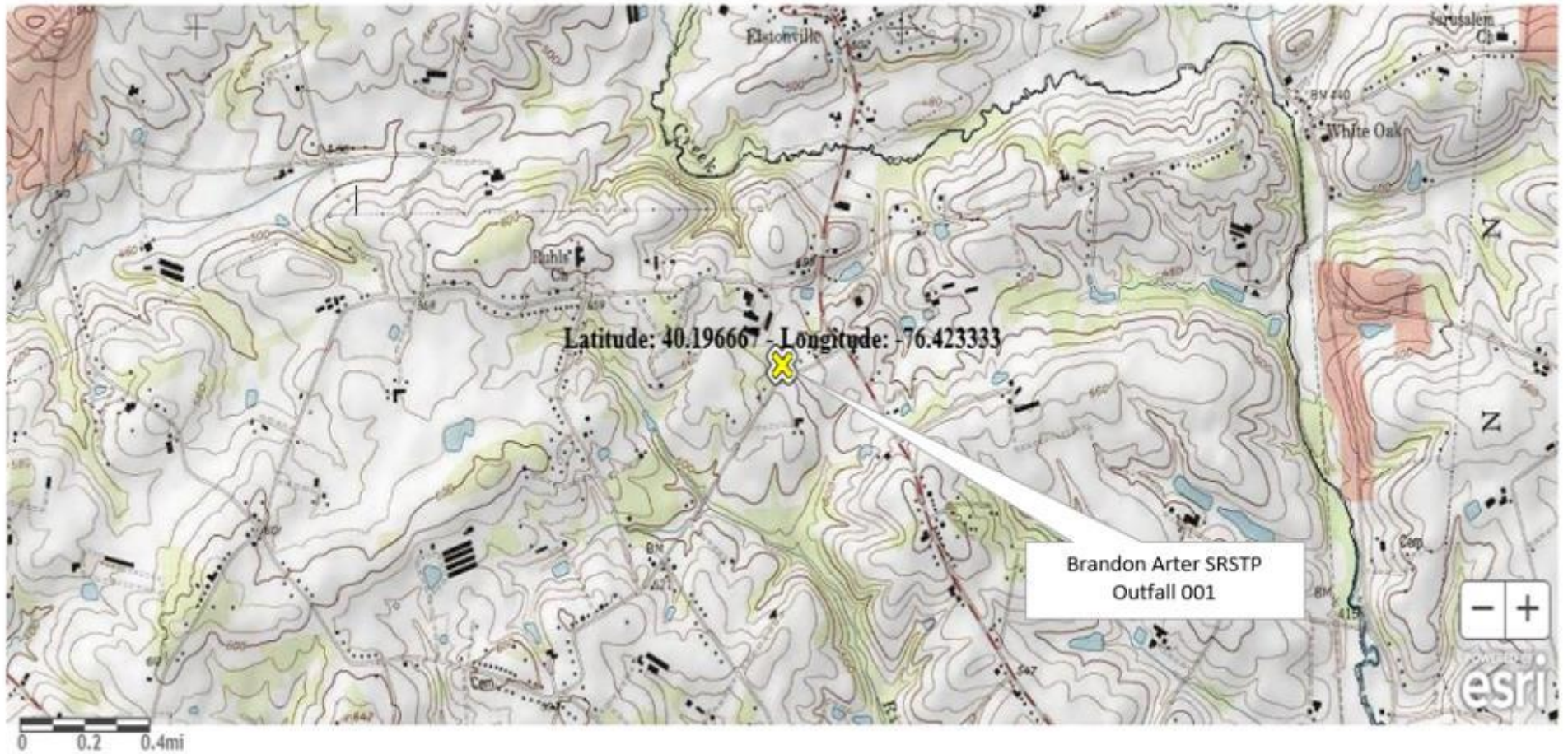
The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). 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	Report Daily Max	XXX	XXX	XXX	XXX	1/year	Estimate
TRC	XXX	XXX	XXX	Report Avg Mo	XXX	Report	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	200	1/year	Grab

Compliance Sampling Location: At discharge from chlorine contact tank

Other Comments: None



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Brandon Arter SRSTP PA0248053 Discharge Point

Region ID:	PA
Workspace ID:	PA20210819151718832000
Clicked Point (Latitude, Longitude):	40.19666, -76.42328
Time:	2021-08-19 11:17:37 -0400



Basin Characteristics			
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0532	square miles
BSLOPD	Mean basin slope measured in degrees	3.2696	degrees
ROCKDEP	Depth to rock	3	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	0.0532	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	3.2696	degrees	1.7	6.4
ROCKDEP	Depth to Rock	3	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	0.000913	ft ³ /s
30 Day 2 Year Low Flow	0.00174	ft ³ /s
7 Day 10 Year Low Flow	0.00019	ft ³ /s

Low-Flow Statistics Flow Report [Low Flow Region 1]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.000913	ft ³ /s
30 Day 2 Year Low Flow	0.00174	ft ³ /s
7 Day 10 Year Low Flow	0.00019	ft ³ /s
30 Day 10 Year Low Flow	0.000421	ft ³ /s
90 Day 10 Year Low Flow	0.00117	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: 4.6.2

StreamStats Services Version: 1.2.22

NSS Services Version: 2.1.2