

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0256048
APS ID 1050510
Authorization ID 1374228

Applicant, Facility and Project Information

Applicant Name	<u>Brian Hart</u>	Facility Name	<u>Hart Properties SRSTP</u>
Applicant Address	<u>3104 Lillian Avenue</u> <u>Murrysville, PA 15668-1905</u>	Facility Address	<u>2784 Pleasant Valley Road</u> <u>Murrysville, PA 15668-2642</u>
Applicant Contact	<u>Brian Hart</u>	Facility Contact	<u>Same as applicant</u>
Applicant Phone	<u>(724) 244-4807</u>	Facility Phone	<u>Same as applicant</u>
Client ID	<u>366404</u>	Site ID	<u>852884</u>
SIC Code	<u>8800</u>	Municipality	<u>Murrysville Borough</u>
SIC Description	<u>Private Households</u>	County	<u>Westmoreland</u>
Date Application Received	<u>October 25, 2021</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>December 27, 2021</u>	WQM App. No.	<u>6521406</u>
Project Description	<u>Application for a new NPDES permit for discharge of treated sewage</u>		

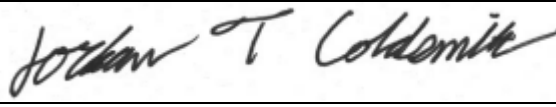


Summary of Review

The applicant proposed to construct a 0.0004 MGD Single Residence Sewage Treatment Plant (SRSTP).

The discharge is to UNT 37357 to Lyons Run, which is classified as Trout Stock Fishes (TSF), located in watershed 19A.

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		 Jordan Coldsmith / Environmental Engineering Specialist	November 17, 2021
x		 Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineer Manager	February 24, 2022
		 Christopher Kriley, P.E. / Program Manager	February 24, 2022

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.0004</u>
Latitude	<u>40° 24' 59.73"</u>	Longitude	<u>-79° 41' 37.24"</u>
Quad Name	<u>Murrysville</u>	Quad Code	<u>40079D6</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Lyons Run (TSF)</u>	Stream Code	<u>37357</u>
NHD Com ID	<u>99407332</u>	RMI	<u>1.1</u>
Drainage Area	<u>0.0661</u>	Yield (cfs/mi ²)	<u>0.00446</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.000295</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStat</u>
Elevation (ft)	<u>1255</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>19A</u>	Chapter 93 Class.	<u>TSF</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>Aluminum, Iron, Manganese, pH</u>		
Source(s) of Impairment	<u>Acid Mine Drainage (AMD)</u>		
TMDL Status	<u>Final</u>	Name	<u>Turtle Creek Watershed</u>
Background/Ambient Data		Data Source	
pH (SU)	<u></u>		<u></u>
Temperature (°F)	<u></u>		<u></u>
Hardness (mg/L)	<u></u>		<u></u>
Other:	<u></u>		<u></u>
Nearest Downstream Public Water Supply Intake	<u>PA AMER WATER CO-PITTSBURGH</u>		
PWS Waters	<u>Monongahela River</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u>19.7</u>

Changes Since Last Permit Issuance: N/A – New Permit Issuance

Other Comments: See Attached Streamstats report

Treatment Facility Summary				
Treatment Facility Name: Hart Properties SRSTP				
WQM Permit No.		Issuance Date		
6521406		Under Department Review		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Aerobic Tank	UV	0.0004
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
.0004		Not Overloaded		Other WWTP

Changes Since Last Permit Issuance: None – New Permit Issuance

Other Comments: WQM Permit No. 6521406 currently under department review; approves construction of a STP with a rated annual average design flow of 0.0004 MGD. The treatment process consists of:

- Bio-kinetic model 960-500 Treatment Tank
- Hydro-Kinetic Bio-film Reactor
- Model AT 1500 UV Disinfection System

Act 537 planning for this project was approved September 30, 2021.

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>.0004</u>
Latitude <u>40° 24' 59.73"</u>	Longitude <u>-79° 41' 37.24"</u>
Wastewater Description: <u>Sewage Effluent</u>	

Technology-Based Limitations

The following effluent limitations and monitoring requirements, at a minimum, will be established in all new and renewed SFTF permits based on the requirements of DEP's "Standard Operating Procedure (SOP) for Clean Water Program New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application" (SOP No. BCW-PMT-003, Version 1.8, Final, November 9, 2012, Revised May 17, 2019).

Parameter	Avg	IMAX	Sample Type	Frequency: SFTFs	Frequency: SRSTPs
Flow (GPD)	Report	XXX	Estimate (SRSTPs) Measured (SFTFs)	1/month	1/year
BOD5 (mg/L)	10	20	Grab	1/month	1/year
TSS (mg/L)	10	20	Grab	1/month	1/year
pH*	6.0 S.U. Inst. Min.	9.0 S.U.	Grab	1/month	1/year
TRC (mg/L)	Report for SRSTPs; Use TRC Spreadsheet to determine WQBELs or 0.02 mg/L for SFTFs		Grab	1/month	1/year
Fecal Coliform (No./100 ml)	200 Geometric Mean (SFTFs) / Average (SRSTPs)		Grab	1/month	1/year

* Technology-Based effluent limits for pH will be imposed based upon Federal Regulation 133.102(c) and State Regulation 95.2(1).

TMDL

This facility discharges to the Turtle Creek Watershed. This Watershed has a TMDL that was finalized on June 29, 2009 and is impaired by metals and pH. Abandoned mine drainage is a source of such impairment. The sewage discharge from the Hart SRSTP is not expected to contribute to the stream impairment. No WLAs have been developed for this sewage discharge, and they are not expected to contribute to the stream impairment for these pollutants. No monitoring requirements for Total Iron, Total Manganese and Total Aluminum will be imposed on this facility.

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
	Annual Average	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (GPD)	Report	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/year	Grab
BOD5	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: Outfall 001

Other Comments:

Ultraviolet (UV) disinfection is used, and therefore, Total Residual Chlorine (TRC) limits are not applicable. Current policy does not require SRSTPs to monitor for UV Intensity.

SRSTPs are not required to monitor for Total Nitrogen and Total Phosphorus in new and reissued permits.

The receiving stream is not impaired for nutrients.

StreamStats Report

Region ID: PA
 Workspace ID: PA20211228140017507000
 Clicked Point (Latitude, Longitude): 40.41528, -79.69315
 Time: 2021-12-28 09:00:37 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0661	square miles
ELEV	Mean Basin Elevation	1255	feet

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0661	square miles	2.26	1400

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
ELEV	Mean Basin Elevation	1255	feet	1050	2580

Low-Flow Statistics Disclaimers [Low Flow Region 4]

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 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.00132	ft ³ /s
30 Day 2 Year Low Flow	0.0029	ft ³ /s
7 Day 10 Year Low Flow	0.000295	ft ³ /s
30 Day 10 Year Low Flow	0.00078	ft ³ /s
90 Day 10 Year Low Flow	0.00184	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. (<http://pubs.usgs.gov/sir/2006/5130/>)