pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0284912**
Facility Type	**Non-Municipal**	APS ID	**1065700**
Major / Minor	**Minor**	Authorization ID	**1400171**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Chase Midler**	Facility Name	**Midler Properties SRSTP**
Applicant Address	1502 Fox Chapel Road	Facility Address	1502 Fox Chapel Road
	Pittsburgh, PA 15238-1203		Pittsburgh, PA 15238-1203
Applicant Contact	Chase Midler	Facility Contact	Same as applicant
Applicant Phone	(724) 747-6663	Facility Phone	Same as applicant
Client ID	370647	Site ID	858098
Ch 94 Load Status	**N/A – new facility**	Municipality	Indiana Township
Connection Status	**N/A – new facility**	County	Allegheny
Date Application Received	June 21, 2022	EPA Waived?	Yes
Date Application Accepted	June 24, 2022	If No, Reason	

Purpose of Application: Application for NPDES Permit for discharge of treated sewage.

Summary of Review

The applicant proposes to construct a 0.0005 MGD single residence treatment facility to replace a malfunctioning septic system serving an existing residential property consisting of one single-family residence. The treatment system will discharge into a dry swale/intermittent stream to UNT 42309 to Rawlins Run. UNT 42309 to Rawlins Run is located in State Watershed 18-A and is classified as a CWF.

Act 537 Planning was approved for this project on May 24, 2022.

The Act 14 – PL 834 Municipal Notification was provided by the letters dated June 8, 2022.

DEP Biologists conducted a Point of First Use (POFU) survey on June 10, 2020 during the planning approval process. The POFU survey concluded that UNT 42309 to Rawlins Run is not capable of supporting aquatic life. This means that this SRSTP is considered an intermittent stream/dry swale discharge. How this affects the effluent limitations will be discussed in the "Development of Effluent Limitations" section below. The complete findings of the POFU survey can be found in Attachment B.

Sludge use and disposal description and location(s): not indicated on application

Public Participation

Approve	Deny	Signatures	Date
X		Grace Polakoski	
		Grace Polakoski, E.I.T. / Environmental Engineering Specialist	June 29, 2022
X		Mahbuba Iasmin	
		Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineer Manager	June 30, 2022

Summary of Review
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.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.0005
Latitude	40º 33' 8"	Longitude	-79º 52' 43"
Quad Name	Glenshaw	Quad Code	1406
Wastewater Description:	Sewage Effluent		
Receiving Waters	Dry swale to UNT 42309 to Rawlins Run	Stream Code	42309
NHD Com ID	123972088	RMI	0.82
Drainage Area	0.0384 sq. mi.	Yield (cfs/mi^2)	0.00375
Q_{7-10} Flow (cfs)	0.000144	Q_{7-10} Basis	USGS StreamStats (Attachment A)
Elevation (ft)	1152	Slope (ft/ft)	
Watershed No.	18-A	Chapter 93 Class.	CWF
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		Name	

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake		Oakmont Water Authority	
PWS Waters	Allegheny River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	5.92

Changes Since Last Permit Issuance: N/A – new facility

Other Comments: RMI, Drainage Area, Q_{7-10}, and yield are all calculated at the headwater of UNT 42309 to Rawlins Run.

Treatment Facility Summary				
Treatment Facility Name: Midler Properties SRSTP				
WQM Permit No.	**Issuance Date**			
0222401	Under DEP review			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Secondary	Extended Aeration	UV Disinfection	0.0005
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.0005		N/A		

Changes Since Last Permit Issuance: N/A – new facility

Compliance History

Other Comments: **This is a new facility therefore there is no applicable compliance history.**

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0005
Latitude 40º 33' 8.00" **Longitude** -79º 52' 43.00"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

The following effluent limitations and monitoring requirements, at a minimum, will be established in all new and renewed SRSTP 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).

Dry Swale/Intermittent Stream Guidance

Per DEP Guidance Document "Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers" (391-2000-014, effective April 12, 2008), new discharges to an intermittent or ephemeral stream, drainage channel, swale, or storm sewer are subject to avoidance criteria and advance treatment requirements. SFTFs (including SRSTPs) are exempt from both the avoidance criteria and advance treatment requirements. Therefore, only the above technology-based effluent limitations will be applied to this facility.

Additional Considerations

For SFTFs/SRSTPs with UV disinfection systems, it is not necessary to require UV intensity or transmittance monitoring in this permit.

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

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.

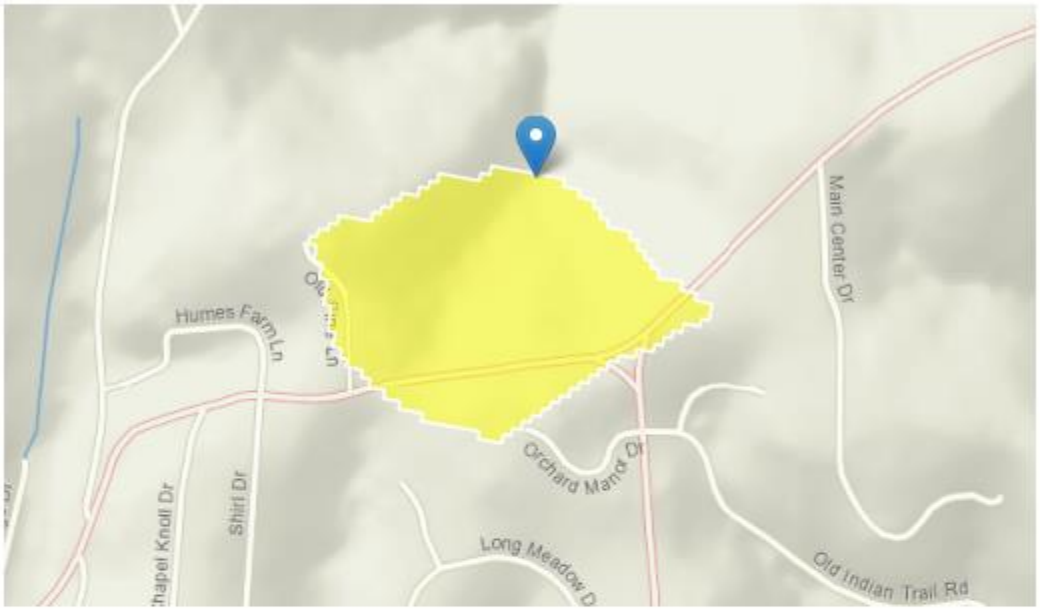
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
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	1000	1/year	Grab

Compliance Sampling Location: Outfall 001

ATTACHMENT A:
USGS StreamStats Report

StreamStats Report

Region ID: PA
Workspace ID: PA20220629145915022000
Clicked Point (Latitude, Longitude): 40.55366, -79.87887
Time: 2022-06-29 10:59:34 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0384	square miles
ELEV	Mean Basin Elevation	1158	feet

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0384	square miles	2.26	1400
ELEV	Mean Basin Elevation	1158	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	0.000665	ft^3/s
30 Day 2 Year Low Flow	0.00149	ft^3/s
7 Day 10 Year Low Flow	0.000144	ft^3/s
30 Day 10 Year Low Flow	0.000394	ft^3/s
90 Day 10 Year Low Flow	0.000937	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/)

ATTACHMENT B:
POFU Survey Memo

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMO

TO	Regis Ryan Sewage Planning Specialist Clean Water Program
FROM	Richard Spear Aquatic Biologist 3 Clean Water Program
DATE	September 10, 2020
RE	Point of First Use Survey Unnamed Tributary 42309 to Rawlins Run State Water Plan: 18A Hydrologic Unit Code: 050100900802 Stream Code: 42309 Aquatic Use Designation:CWF Indiana Township, Allegheny County

INTRODUCTION

On June 10, 2020, at the request of Regis Ryan of the Clean Water Program, a Point of First Surface Water Use (POFU) survey was conducted on an Unnamed Tributary 42309 to Rawlins Run, located in Indiana Township, Allegheny County. The objective of the survey was to determine if the tributary could support an Aquatic Life Use as defined in 25 Pennsylvania Code §93.9q in the vicinity of the Felizzi property, located at 1502 Fox Chapel Road Pittsburgh, PA located at approximately Latitude: 40.55171, Longitude: -79.87914. On this day Regis Ryan and I were accompanied by the real estate agent whose name I didn't get, Fred Brandt and his son and the neighbor Jim to sample UNT 42309 to Rawlins Run for a POFU survey due to a malfunctioning septic system.

The drainage area mostly consists of forest and residential area. UNT 42309 to Rawlins Run is in the Allegheny River State Water Plan (18A), and the Lower Allegheny River Hydrologic Unit (Hydrologic Unit Code 0501009). UNT 42309 to Rawlins Run is listed as attaining its designated Aquatic Life Use for Cold Water Fishery (CWF).

SAMPLING METHODOLOGY

The point of first aquatic life use is the location at which a body of water can support aquatic life as defined in 25 Pennsylvania Code §93. Guidance for determining the point of first aquatic life use is in the Department's guidance document #391-2000-014, Policy and Procedures for Evaluating Wastewater

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Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers (revised April 12, 2008). Specifically, Appendix B of the guidance document provides additional guidance when making a point of first use determination. This survey was performed using a kick screen 1.0m by 1.0m with 0.5mm pores. Each kick disturbed a 1m sq. area and 3 kick screen samples were completed at both sites.

Basic water quality (Table 1) and macroinvertebrates (Table 2) were examined in the stream that receives the discharge from the outfall. The station was established approximately ½ mile from the house (Figures 2 and 3). Basic water quality parameters were examined using a field meter and macroinvertebrates were collected according to the Department's Qualitative Benthic Macroinvertebrate Data Collection Protocol, found in the Water Quality Monitoring Protocols for Streams and Rivers 2018 (Monitoring Book), which can be found by following this link: http://files.dep.state.pa.us/Water/Drinking%20Water%20and%20Facility%20Regulation/WaterQualityPortalFiles/Technical%20Documentation/MONITORING_BOOK.pdf

RESULTS

The location of sampling was forested, with a forested riparian buffer. The stream and the banks were steep. The stream was shallow and narrow, approximately 1 ft wetted width.

Basic water chemistry sampling (Table 1), found a high pH (8.95) and a high specific conductivity (1437 uhos/cm). Only one taxa of macroinvertebrates were found in the stream at the two upstream sites and two taxa at the downstream site (Table 2). Of the two taxa, only 1 was long-lived taxa.

DISCUSSION AND CONCLUSIONS

The objective of this study was to examine aquatic life in the Unnamed 42309 to Rawlins Run to determine if and where the stream is capable of supporting an aquatic life use as defined in 25 Pennsylvania Code §93.9q, where water quality standards must be met.

Results from this study suggest that the stream does not have an aquatic life use at the three point where the samples were collected and the point of first use is Rawlins Run and not UNT 42309 to Rawlins Run.
In conclusion, at the time of the survey the point of first use and the point at which the stream is perennial is Rawlins Run.

cc: Stream File –
Christopher Kriley – SWRO, Environmental Program Manager
Michael (Josh) Lookenbill – CO, Environmental Group Manager

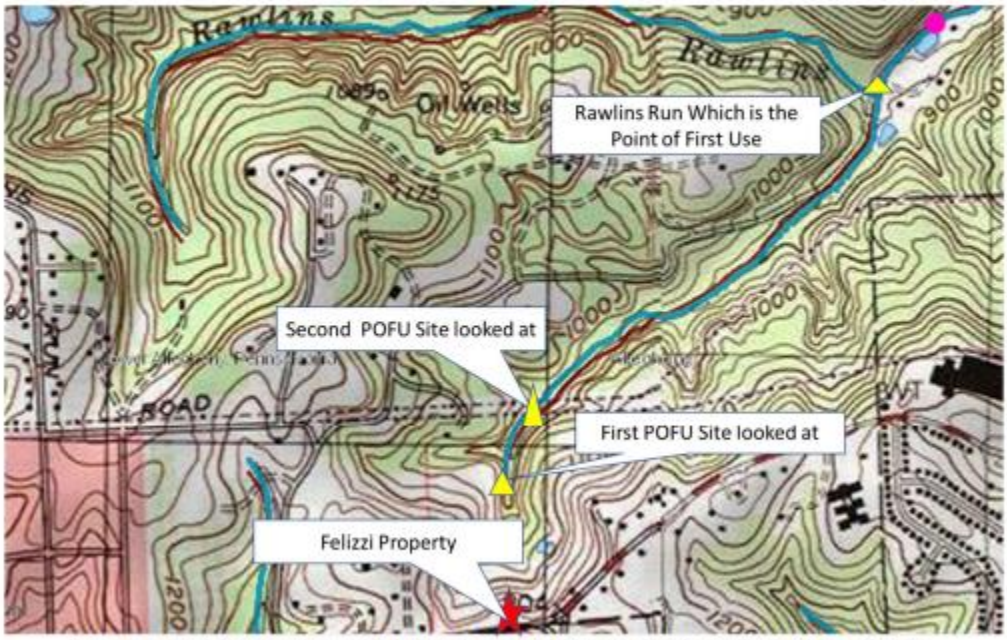

Figure 1. A map showing the UNT 42309 to Rawlins Run, the Felizzi Property and Rawlins Run

Figure 2. Picture of UNT 42309 to Rawlins Run looking upstream.

Figure 3. Picture of UNT 42309 to Rawlins Run looking downstream