pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0284815**
Wastewater Type	**Sewage**	APS ID	**1057687**
Facility Type	**SRSTP**	Authorization ID	**1386582**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**McElroy Road LLC**	Facility Name	**McElroy Road LLC SRSTP**
Applicant Address	733 Thompson Run Road	Facility Address	2453 Rochester Road
	Pittsburgh, PA 15237-3970		Sewickley, PA 15143-8667
Applicant Contact	Russell Lane	Facility Contact	Russell Lane
Applicant Phone	(412) 715-6088	Facility Phone	(412) 715-6088
Client ID	368431	Site ID	855532
SIC Code	9999	Municipality	Franklin Park Borough
SIC Description	Public Admin. - Nonclassifiable Establishment	County	Allegheny
Date Application Received	March 2, 2022	WQM Required	Yes
Date Application Accepted	March 10, 2022	WQM App. No.	0222400

Project Description: Permit to discharge treated sewage from a single residence

Summary of Review

This review is in response to a new application received on March 2, 2022. This application is needed to replace a malfunctioning on-lot sewage system with a single residence sewage treatment plant (SRSTP). Water quality management (WQM) permit 0222400 was submitted with the NPDES application and is currently under review. The WQM permit is for the construction and operation of sewage treatment facilities.

The NPDES application lists a flow of 400 gpd, but the planning approval and the WQM permit are designed for 500 gpd or 1.25 EDU's. The permitted flow for this facility will be 500 gpd. This SRSTP will replace the malfunctioning on-lot system located at 2453 Rochester Road, Sewickley PA in Franklin Park Borough, Allegheny County. The 500 gpd SRSTP will consist of a 1500 gal. concrete septic tank, a Premier Tech EC7-500-C-P coco filter with an integrated UV disinfection unit. Treated effluent will discharge through outfall 001 to a tributary of Rippling Run, a trout stocking fishery.

This SRSTP is not eligible for the Department's *PAG-04 General Permit for Discharges from Small Flow Treatment Facilities* because the proposed treatment system does not conform to the Department's *Small Flow Treatment Facilities Manual* dated December 2, 2006 (Document No. 362-0300-002).

Pursuant to 25 Pa. Code §§ 71.64(d) and 92a.47(a), the *Small Flow Treatment Facilities Manual*, the Department's evaluation of the performance characteristics of the Ecoflo EC7 Series Coco filter in the On-lot Alternate Technology Listings, average monthly technology-based effluent limits of 10 mg/L will be imposed for BOD5 and TSS; a fecal coliform limit of 200/100mL will be imposed.

In accordance with DEP's procedure for converting average monthly effluent limitations to instantaneous maximum (IMAX) effluent limitations—described in Chapter 2, Section C of the Department's *Technical Guidance for the Development and*

Approve	Deny	Signatures	Date
X		James Vanek James Vanek, P.E. / Environmental Engineer	April 13, 2022
X		Mahbuba Iasmin Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineer Manager	April 18, 2022

Summary of Review

Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits, October 1, 1997 (Doc. No. 362-0400-001)—IMAX limits of 20 mg/L also will be imposed for BOD5 and TSS.

25 Pa. Code § 92a.47(a)(7) and 25 Pa. Code § 95.2(1) requires technology-based effluent limits of 6.0 s.u. (instantaneous minimum) and 9.0 s.u.

25 Pa. Code § 92a.61(b) requires flow monitoring.

Sewage facilities with design flows less than 2,000 GPD are exempt from monitoring for Total Nitrogen and Total Phosphorus in new and renewal permits. SRSTPs are excluded from the Electronic Discharge Monitoring Report (eDMR) system.

The applicant has complied with Act 14. The Department approved planning for this project on February 28, 2022 (DEP Code 02933-21-237). Draft permit issuance is recommended.

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.

Discharge and Stream Data – 2 - Receiving Waters and PWS

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.4
Latitude	40º 35' 47.33"	Longitude	-80º 6' 56.41"
Quad Name	Emsworth	Quad Code	
Wastewater Description:	Sewage Effluent		

Receiving Waters	Unnamed Tributary to Rippling Run (TSF)	Stream Code	36626
NHD Com ID	99681438	RMI	0.2500
Drainage Area	0.19	Yield (cfs/mi^2)	0.006
Q_{7-10} Flow (cfs)	0.0011	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1103	Slope (ft/ft)	
Watershed No.	20-G	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use	none	Exceptions to Criteria	none
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

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

Nearest Downstream Public Water Supply Intake	Midland Borough Municipal Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	5400
PWS RMI	964	Distance from Outfall (mi)	25

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.

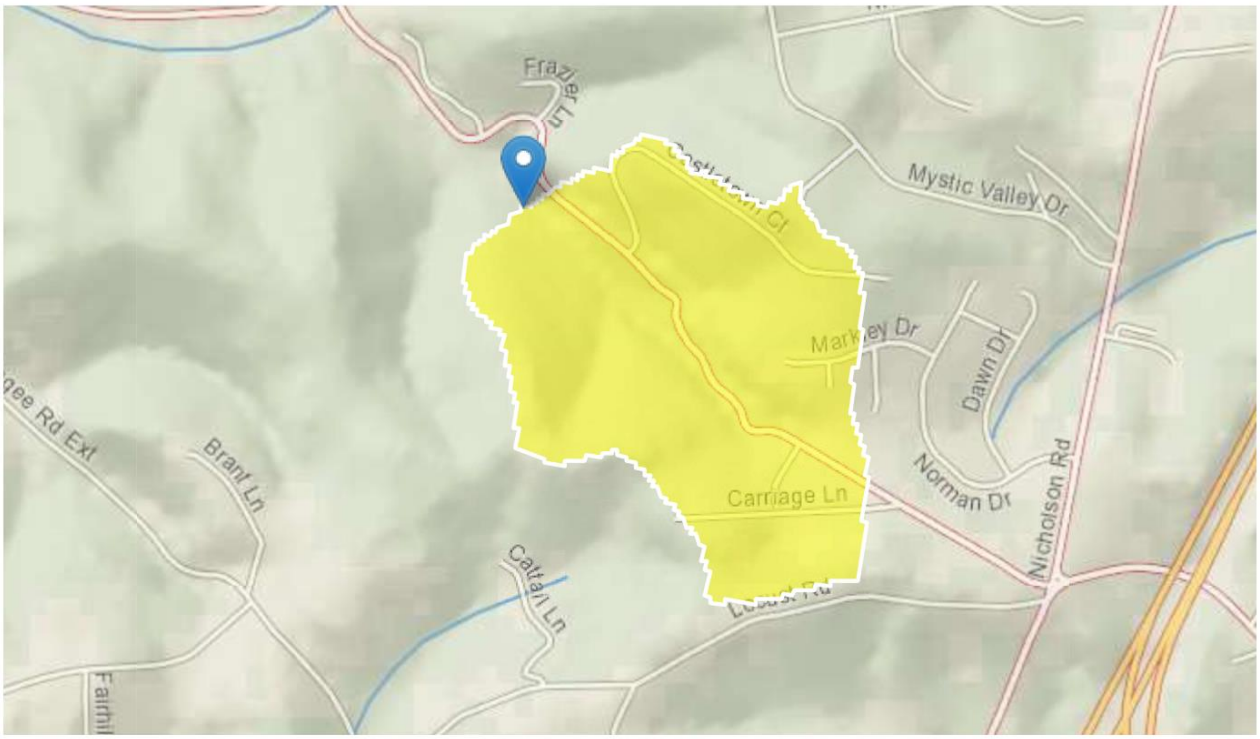
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year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

StreamStats Report for McElroy Rd LLC SRSTP

Region ID: PA
Workspace ID: PA20220413114521241000
Clicked Point (Latitude, Longitude): 40.59569, -80.11413
Time: 2022-04-13 07:45:47 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	0.19	square miles
ELEV	Mean Basin Elevation	1201	feet
FOREST	Percentage of area covered by forest	69.2972	percent
PRECIP	Mean Annual Precipitation	37	inches
STORAGE	Percentage of area of storage (lakes ponds reservoirs wetlands)	0	percent

Parameter Code	Parameter Description	Value	Unit
URBAN	Percentage of basin with urban development	29.9836	percent

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.19	square miles	2.26	1400
ELEV	Mean Basin Elevation	1201	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	0.00424	ft^3/s
30 Day 2 Year Low Flow	0.00883	ft^3/s
7 Day 10 Year Low Flow	0.00106	ft^3/s
30 Day 10 Year Low Flow	0.00257	ft^3/s
90 Day 10 Year Low Flow	0.00571	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/)

Peak-Flow Statistics Parameters [Peak Flow Region 2 SIR 2019 5094]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.19	square miles	0.92	1160
STORAGE	Percent Storage	0	percent	0	8.9

Peak-Flow Statistics Disclaimers [Peak Flow Region 2 SIR 2019 5094]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [Peak Flow Region 2 SIR 2019 5094]

Statistic	Value	Unit
50-percent AEP flood	16.2	ft^3/s
20-percent AEP flood	28.2	ft^3/s
10-percent AEP flood	38	ft^3/s
4-percent AEP flood	52.6	ft^3/s
2-percent AEP flood	64.7	ft^3/s
1-percent AEP flood	78.2	ft^3/s
0.5-percent AEP flood	93.4	ft^3/s
0.2-percent AEP flood	116	ft^3/s

Peak-Flow Statistics Citations

Roland, M.A., and Stuckey, M.H.,2019, Development of regression equations for the estimation of flood flows at ungaged streams in Pennsylvania: U.S. Geological Survey Scientific Investigations Report 2019–5094, 36 p. (https:// doi.org/10.3133/sir20195094)

General Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.19	square miles	2.26	1720
PRECIP	Mean Annual Precipitation	37	inches	33.1	50.4
CARBON	Percent Carbonate	0	percent	0	99
FOREST	Percent Forest	69.2972	percent	5.1	100
URBAN	Percent Urban	29.9836	percent	0	89

General Flow Statistics Disclaimers [Statewide Mean and Base Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

General Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Harmonic Mean Streamflow	0.0366	ft^3/s

General 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/)

Annual Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.19	square miles	2.26	1720
ELEV	Mean Basin Elevation	1201	feet	130	2700
PRECIP	Mean Annual Precipitation	37	inches	33.1	50.4
FOREST	Percent Forest	69.2972	percent	5.1	100
URBAN	Percent Urban	29.9836	percent	0	89

Annual Flow Statistics Disclaimers [Statewide Mean and Base Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Annual Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Mean Annual Flow	0.244	ft^3/s

Annual 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/)

Base Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.19	square miles	2.26	1720
PRECIP	Mean Annual Precipitation	37	inches	33.1	50.4
CARBON	Percent Carbonate	0	percent	0	99
FOREST	Percent Forest	69.2972	percent	5.1	100
URBAN	Percent Urban	29.9836	percent	0	89

Base Flow Statistics Disclaimers [Statewide Mean and Base Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Base Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Base Flow 10 Year Recurrence Interval	0.0888	ft^3/s
Base Flow 25 Year Recurrence Interval	0.0789	ft^3/s
Base Flow 50 Year Recurrence Interval	0.0734	ft^3/s

Base 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/)