pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0255963**
Wastewater Type	**Sewage**	APS ID	**1045694**
Facility Type	**SFTF**	Authorization ID	**1365616**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**L E Development LLC**	Facility Name	**L E Development Properties**
Applicant Address	1 Pink House Lane	Facility Address	22-24 Lanes End Drive
	Sewickley, PA 15143-9472		Sewickley, PA 15143
Applicant Contact	John Means	Facility Contact	Same as applicant
Applicant Phone	(412) 897-6319	Facility Phone	Same as applicant
Client ID	364918	Site ID	851439
SIC Code	**4952**	Municipality	Sewickley Heights Borough
SIC Description	**Sewerage Systems**	County	Allegheny
Date Application Received	August 13, 2021	WQM Required	Yes
Date Application Accepted	August 18, 2021	WQM App. No.	0221402

Project Description: Application for a new NPDES permit for discharge of treated sewage

Summary of Review

The applicant proposed to construct a 0.002 MGD small flow treatment facility to replace a malfunctioning on-lot system at an existing residential property consisting of a mansion and several outbuildings.

The discharge is to UNT 36662 to Little Sewickley Creek, which is classified as HQ-TSF, located in State Watershed 20-G.

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		Grace Polakoski	
		Grace Polakoski, E.I.T. / Environmental Engineering Specialist	August 20, 2021
X		James Vanek	
		James M. Vanek, P.E. / Environmental Engineer Manager	
		Christopher Kriley, P.E. / Program Manager	September 16, 2021

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.002
Latitude	40º 33' 55.72"	Longitude	-80º 10' 26.98"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	UNT to Little Sewickley Creek (HQ-TSF)	Stream Code	36662
NHD Com ID	99682578	RMI	0.09
Drainage Area	0.32 sq. mi.	Yield (cfs/mi^2)	0.0059
Q_{7-10} Flow (cfs)	0.00189	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	846	Slope (ft/ft)	
Watershed No.	20-G	Chapter 93 Class.	HQ-TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	CAUSE UNKNOWN		
Source(s) of Impairment	HIGHWAY/ROAD/BRIDGE RUNOFF (NON-CONSTRUCTION RELATED)		
TMDL Status		Name	

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

Nearest Downstream Public Water Supply Intake	Duquesne Light Co-Phillips P S		
PWS Waters	Ohio River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	5.03

Changes Since Last Permit Issuance: N/A - New Permit Issuance.

Other Comments: See attached StreamStats Report.

Treatment Facility Summary				
Treatment Facility Name: L E Development Properties SFTF				
WQM Permit No.	**Issuance Date**			
0221402	**Under Department Review**			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Tertiary	Septic Tank, Coco Filter	UV	0.002
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.002		Not Overloaded	Septic Tank	Other WWTP

Changes Since Last Permit Issuance: N/A - New Permit Issuance.

Other Comments: WQM Permit No. 0221402, currently under Department review, approves construction of a STP with a rated annual average design flow of 0.002 MGD. The treatment process consists of:

- One (1) 2,000 gal septic tank
- Three (3) 1,000 gal septic tanks
- Two (2) Ecoflo EC7-1350 coco filters
- Two (2) Jet Model 952 UV systems (in parallel)

Act 537 Planning was approved for this project on July 8, 2021.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.002
Latitude 40º 33' 55.72" **Longitude** -80º 10' 26.98"
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 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).

Additional TBELs:

Outfall 001 discharges to an UNT to Little Sewickley Creek, which is classified as a HQ-TSF. The proposed SFTF is a repair for an existing on-lot system and an anti-degradation analysis is typically not required. Act 537 Planning was approved for this SFTF on July 8, 2021.

The following Antidegradation Best Available Combination of Technologies (ABACT) effluent limits, at a minimum, will be established based on the requirements of DEP's "Water Quality Antidegradation Implementation Guidance" (Doc. No. 391-0300-002; November 29, 2003).

Parameter	Treatment Process Performance Expectations (mg/L)		
	<2,000 gpd	2,000-50,000 gpd	>50,000 gpd
$CBOD_5$ (May 1 – Oct. 31)	10	10	10
$CBOD_5$ (Nov. 1 – Apr. 30)	20	20	10
Suspended Solids	20	10	10
NH_3-N (May 1 – Oct. 31)	5.0	3.0	1.5
NH_3-N (Nov. 1 – Apr. 30)	15.0	9.0	4.5
Effective disinfection	Disinfection should be accomplished using a method that leaves no detectable residual. Disinfection using ultra-violet light or other non-chlorine based systems is encourage and must be considered.		
Other parameters, as needed	*Determined by the size and characteristics of the proposed discharge, may include – NO_2/NO_3-N, Total Phosphorus, Copper, Lead, Zinc*		

The limitations and monitoring requirements, specified on page 7 of this Fact Sheet, reflect the most stringent limitation amongst the above Technology-Based Effluent Limitations.

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. The receiving stream is not impaired for nutrients.

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.

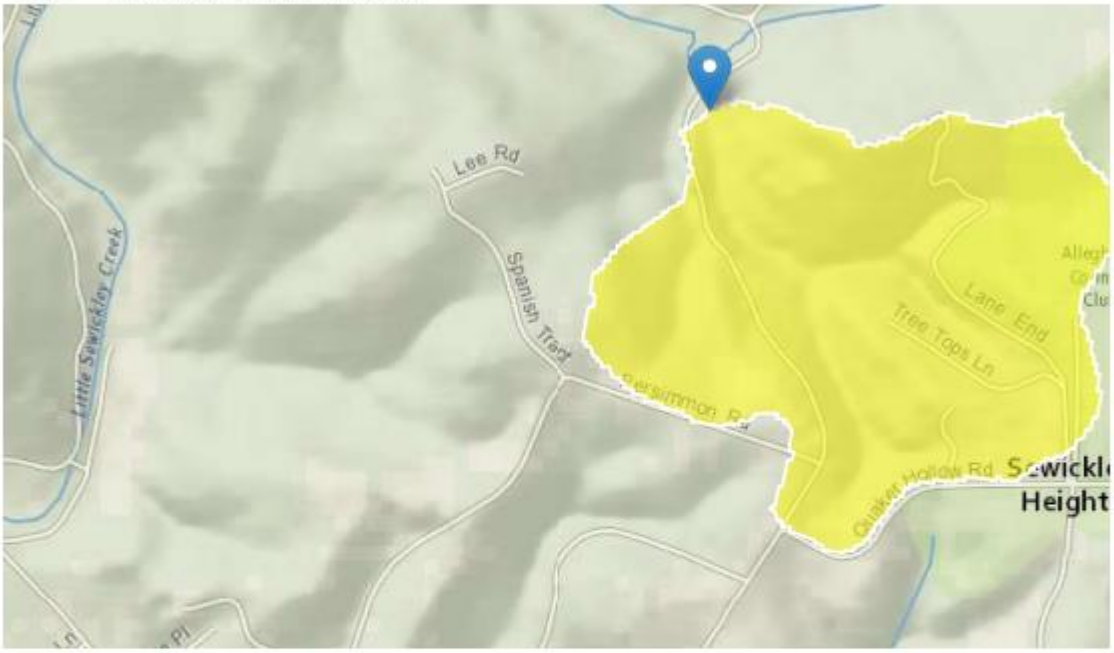
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
BOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18.0	1/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6.0	1/month	Grab

Compliance Sampling Location: Outfall 001

Other Comments:

StreamStats Report

Region ID: PA
Workspace ID: PA20210908143125765000
Clicked Point (Latitude, Longitude): 40.56548, -80.17415
Time: 2021-09-08 10:31:44 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.32	square miles
ELEV	Mean Basin Elevation	1071	feet

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.32	square miles	2.26	1400

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
ELEV	Mean Basin Elevation	1071	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	0.00697	ft^3/s
30 Day 2 Year Low Flow	0.0141	ft^3/s
7 Day 10 Year Low Flow	0.00189	ft^3/s
30 Day 10 Year Low Flow	0.00436	ft^3/s
90 Day 10 Year Low Flow	0.0092	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/)

Application Version: 4.6.2
StreamStats Services Version: 1.2.22
NSS Services Version: 2.1.2