

Application Type New  
Wastewater Type Sewage  
Facility Type SRSTP

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

Application No. PA0255611  
APS ID 1002346  
Authorization ID 1289538

**Applicant, Facility and Project Information**

Applicant Name	<u>Lauren Wengler</u>	Facility Name	<u>Wengler Property</u>
Applicant Address	<u>138 Forrest Drive</u> <u>Fombell, PA 16123</u>	Facility Address	<u>138 Forrest Drive</u> <u>Fombell, PA 16123</u>
Applicant Contact	<u>Lauren Wengler</u>	Facility Contact	<u>Same as Applicant</u>
Applicant Phone	<u>(724) 504-9012</u>	Facility Phone	<u>Same as Applicant</u>
Client ID	<u>352555</u>	Site ID	<u>839061</u>
SIC Code	<u>8800</u>	Municipality	<u>Franklin Township</u>
SIC Description	<u>Private Households</u>	County	<u>Beaver</u>
Date Application Received	<u>September 24, 2019</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>September 25, 2019</u>	WQM App. No.	<u>0419403</u>
Project Description	<u>Issue a new NPDES permit for a proposed SRSTP</u>		

**Summary of Review**

An individual NPDES permit is being issued to authorize the discharge from a proposed 500 GPD single residence sewage treatment plant (SRSTP) that will serve an existing four-bedroom residential dwelling owned by Lauren Wengler. The facility is located in Franklin Township, Beaver County.

The treated effluent discharges to an unnamed tributary of Doe Run, which is classified as Warm Water Fishes (WWF) located in State Watershed No. 20C. On May 30, 2019, Department Biologists performed a Point of First Use Survey on the UNT to Doe Run. Please reference that report for further details on the receiving stream.

The effluent limitations and monitoring requirements (see page 4 of the Fact Sheet) are to be established for new individual SRSTP permit in accordance to the SOP-New and Reissuance Individual SFTF NPDES Permits. Water quality modeling is not required for SFTFs / SRSTPs.

For SFTFs / SRSTPs with UV system, it is not necessary to require UV intensity or transmittance monitoring in the permit. Sewage facilities with design flows < 2,000 GPD are exempt from monitoring Total Nitrogen and Total Phosphorus in new and renewal permits. SRSTPs are excluded from Electronic Discharge Monitoring Report (eDMR) system.

WQM Permit No. 0419403 will be issued concurrently with this NPDES Permit.

The WQM Permit application is requesting construction of sewage facilities consisting of:

- A 1500-gallon dual compartment concrete septic tank
- A Zabel A300 effluent filter

Approve	Deny	Signatures	Date
X		/s/ Yingmin Xue / Environmental Engineering Specialist	02/12/2020
X		/s/ Donald J. Leone, P.E. / Environmental Engineer Manager	02/13/2020

**Summary of Review**

- A Premier Tech EC7-500-C-P Coco filter
- An integrated pump and DiUV unit

The Act 537 Planning for the proposed project was approved by the PA Department of Environmental Protection (DEP) on September 9, 2019.

The Act 14 notification letters were provided by June 4, 2019 and no comments were received.

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, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.0005</u>
Latitude	<u>40° 49' 1.17"</u>	Longitude	<u>-80° 10' 40.01"</u>
Quad Name	<u>Zelienople</u>	Quad Code	<u>1204</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>UNT to Doe Run (WWF)</u>	Stream Code	<u>UNT to 34901</u>
NHD Com ID		RMI	<u>0.66</u>
Drainage Area	<u>0.0441 square miles</u>	Yield (cfs/mi <sup>2</sup> )	<u>0.0038</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.000166</u>	Q <sub>7-10</sub> Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>1084</u>	Slope (ft/ft)	<u>0.046</u>
Watershed No.	<u>20C</u>	Chapter 93 Class.	<u>Warm Water Fishes</u>
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	<u>Not Assessed</u>		
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	<u>Beaver Falls Muni Auth</u>		
PWS Waters	<u>Beaver River</u>	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Other Comments: New discharge

**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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (GPD)	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: None

# StreamStats Report

Region ID: PA  
Workspace ID: PA20200130202123883000  
Clicked Point (Latitude, Longitude): 40.81519, -80.17591  
Time: 2020-01-30 15:21:40 -0500



## Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0441	square miles
ELEV	Mean Basin Elevation	1092	feet

## Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0441	square miles	2.26	1400
ELEV	Mean Basin Elevation	1092	feet	1050	2580

Low-Flow Statistics Disclaimer<sup>S</sup><sub>(Low Flow Region 4)</sub>

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

Low-Flow Statistics Flow Report<sub>(Low Flow Region 4)</sub>

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.000741	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.00164	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.000166	ft <sup>3</sup> /s
30 Day 10 Year Low Flow	0.000445	ft <sup>3</sup> /s
90 Day 10 Year Low Flow	0.00104	ft <sup>3</sup> /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/>)

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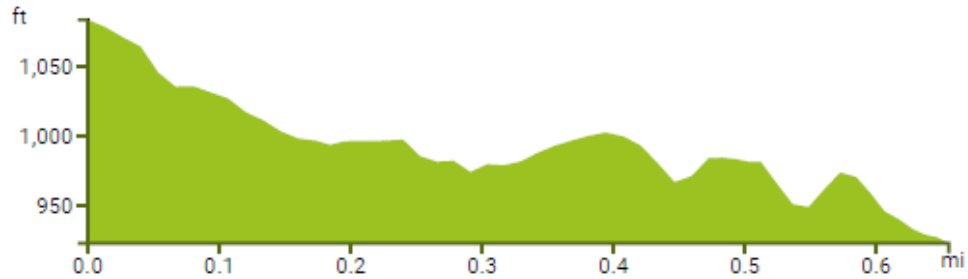
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Application Version: 4.3.11

### Elevation profile



Latitude	Longitude	Elevation (ft)	Distance (mi)
40.81693	-80.17781	1084.24	0.00
40.81678	-80.17764	1078.82	0.01
40.81664	-80.17747	1071.54	0.03
40.81650	-80.17730	1064.89	0.04
40.81635	-80.17713	1046.16	0.05
40.81621	-80.17696	1035.84	0.07
40.81607	-80.17679	1036.24	0.08
40.81592	-80.17662	1031.76	0.09
40.81578	-80.17645	1027.32	0.11
40.81563	-80.17628	1017.47	0.12
40.81549	-80.17611	1011.56	0.13
40.81535	-80.17594	1003.60	0.15
40.81520	-80.17577	998.45	0.16
40.81506	-80.17560	996.82	0.17
40.81507	-80.17539	993.83	0.18
40.81508	-80.17518	996.44	0.20



Latitude	Longitude	Elevation (ft)	Distance (mi)
40.81508	-80.17497	996.62	0.21
40.81509	-80.17476	996.58	0.22
40.81510	-80.17455	997.05	0.23
40.81511	-80.17434	997.63	0.24
40.81498	-80.17417	985.73	0.25
40.81485	-80.17399	981.72	0.27
40.81471	-80.17382	982.32	0.28
40.81458	-80.17365	974.21	0.29
40.81445	-80.17347	979.89	0.30
40.81432	-80.17330	979.08	0.32
40.81419	-80.17312	981.96	0.33
40.81406	-80.17295	988.17	0.34
40.81393	-80.17278	993.18	0.36
40.81380	-80.17260	996.90	0.37
40.81366	-80.17243	1000.27	0.38
40.81353	-80.17226	1002.78	0.39
40.81343	-80.17205	1000.04	0.41
40.81333	-80.17184	993.79	0.42
40.81322	-80.17162	980.88	0.43
40.81312	-80.17141	966.92	0.45
40.81302	-80.17120	971.29	0.46
40.81292	-80.17099	984.50	0.47
40.81291	-80.17080	984.64	0.48
40.81291	-80.17062	983.67	0.49

Latitude	Longitude	Elevation (ft)	Distance (mi)
40.81290	-80.17043	981.80	0.50
40.81290	-80.17024	981.67	0.51
40.81303	-80.17008	965.84	0.52
40.81316	-80.16993	950.92	0.54
40.81329	-80.16977	948.96	0.55
40.81329	-80.16954	961.81	0.56
40.81330	-80.16931	973.83	0.57
40.81331	-80.16908	970.69	0.58
40.81326	-80.16888	959.02	0.60
40.81322	-80.16868	945.83	0.61
40.81317	-80.16849	940.11	0.62
40.81313	-80.16829	932.87	0.63
40.81311	-80.16812	928.96	0.64
40.81309	-80.16794	927.10	0.65
40.81308	-80.16777	922.76	0.66

Elevation data provided by: **ESRI Elevation Analysis services**  
(<https://developers.arcgis.com/rest/elevation/api-reference/profile.htm>)

COMMONWEALTH OF PENNSYLVANIA  
Department of Environmental Protection  
Southwest Regional Office

July 19, 2019  
(412) 442-4178

**SUBJECT:** Point of First Use Survey,  
Unnamed and Undocumented Tributary to Doe Run  
State Water Plan 20C, WWF, HUC Code 05030105, Stream Code N/A  
Franklin Township, Beaver County, Pennsylvania

**To:** Tom Flanagan  
Sewage Planning Supervisor

**From:** Jamie Detweiler  
Aquatic Biologist 2  
Southwest Regional Office

On May 30, 2019, the Clean Water Program biologists performed an examination of the Unnamed and Undocumented Tributary to Doe Run in Franklin Township, Beaver County (Figure 1). The stream drains the Wengler Property, which is located at 130 Forrest Drive, Fombell, PA 16123. The latitude of the sampling location is 40.8160°, and the longitude is -80.1763°. The watercourse was approximately 1 meter wide. William Vincett from the Department accompanied us, the property owner, Jeffrey Wengler, was also present.

This survey was performed using a D-frame kick net. Each kick disturbed a 1m sq. area. Six kicks were conducted.

According to the "Implementation Guidance for Evaluating Wastewater Discharges to Drainage Swales and Ditches," a stream has an aquatic use where it is capable of supporting a benthic macroinvertebrate population composed of two or more recognizable taxonomic groups. The representative organisms must be large enough to be seen by the unaided eye and retained by a US Standard No. 35 Sieve (0.500 mm) as well as living part of their life cycle within or upon substrates in a body of water. In addition, the organisms must have relatively long aquatic life stages.

### Sampling Results

The results from the kick samples collected a total of eleven macroinvertebrate family level taxa, and one higher taxon. They included the following families: Chironomidae (Midges), Tipulidae (including *Tipula sp.*, Crane Flies), Ceratopogonidae (Biting Midges), Tabanidae (Horse Flies), Stratiomyidae (Soldier Flies), Lampyridae (Fireflies), Hydropsychidae (Net-spinning Caddisflies),

Nemouridae (Spring Stonefly), Gammaridae (Scuds), Asellidae (Scuds),  
Cambaridae (Crayfish)  
and the following higher taxa: Oligochaetae (Segmented Worms)

Water chemistries taken out in the field with an YSI Pro DSS multimeter were as follows: Temperature of 14.2° C, DO of 9.58 mg/l, Specific Conductivity of 213.9 µg/cm and a pH of 6.71.

### **Conclusion**

Three of the twelve taxa identified have long-lived taxa. The presence of these macroinvertebrates indicates an aquatic life use that must be protected. There is an aquatic life use in the Unnamed and Undocumented Tributary to Doe Run and the discharge permit limits should support this aquatic use.

**CC: Rick Spear  
Stacey Greenwald  
Regis Ryan  
Don Leone  
Chris Kriley  
Stream Files**



**Figure 1. Approximate location of sampling point and the Unnamed and Undocumented Tributary to Doe Run (blue line).**