

Application Type Renewal
Wastewater Type Sewage
Facility Type SFTF

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

Application No. PA0103047
APS ID 975728
Authorization ID 1241840

Applicant, Facility and Project Information

Applicant Name	<u>Jerome M. Laughlin</u>	Facility Name	<u>Laughlin Builders SFTF</u>
Applicant Address	<u>8333 Edinboro Road</u> <u>Erie, PA 16509</u>	Facility Address	<u>8333 Edinboro Road</u> <u>Erie, PA 16509</u>
Applicant Contact	<u>Jerome Laughlin</u>	Facility Contact	<u>Jerome Laughlin</u>
Applicant Phone	<u>(814) 866-1277</u>	Facility Phone	<u>(814) 866-1277</u>
Client ID	<u>44990</u>	Site ID	<u>250298</u>
SIC Code	<u>8800</u>	Municipality	<u>McKean Township</u>
SIC Description	<u>Private Households</u>	County	<u>Erie County</u>
Date Application Received	<u>August 29, 2018</u>	WQM Required	<u>No</u>
Date Application Accepted	<u>August 29, 2018</u>	WQM App. No.	<u>-</u>
Project Description	<u>Renewal of NPDES Permit for an existing discharge of treated sanitary wastewater.</u>		

Summary of Review

Act 14 - Proof of Notification was submitted and received.

A Part II Water Quality Management permit is not required at this time.

The applicant should be able to meet the limits of this permit, which will protect the uses of the receiving stream.

I. OTHER REQUIREMENTS:

- | | |
|--|---------------------------------|
| A. AMRs | F. Stormwater into sewers |
| B. DMRs | G. Right of way |
| C. Depth of Septage and Scum Measurement | H. Solids handling |
| D. Septic Tank Pumping | I. Public Sewerage Availability |
| E. Effluent Chlorine Optimization and Minimization | |

II. SPECIAL CONDITIONS: None.

Permitted treatment consists of: Two 1,500 gallon septic tanks, alum feed for phosphorus control, a 500 gallon dosing tank, two surface sand filters, and tablet chlorine disinfection with a 500 gallon chlorine contact tank.
(WQM Permit no. 2573402)

There are no open violations in efacts associated with the subject Client ID (44990) as of 8/12/2019.

Approve	Deny	Signatures	Date
X		Stephen A. McCauley, E.I.T. / Environmental Engineering Specialist	
X		Justin C. Dickey, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.0017</u>
Latitude	<u>42° 1' 22.50"</u>	Longitude	<u>80° 7' 15.10"</u>
Quad Name	<u>-</u>	Quad Code	<u>-</u>
Wastewater Description: <u>treated sanitary wastewater</u>			
Receiving Waters	<u>Unnamed Tributary to the Elk Creek (CWF, MF)</u>	Stream Code	<u>N/A</u>
NHD Com ID	<u>134205237</u>	RMI	<u>N/A</u>
Drainage Area	<u>-</u>	Yield (cfs/mi ²)	<u>-</u>
Q ₇₋₁₀ Flow (cfs)	<u>-</u>	Q ₇₋₁₀ Basis	<u>-</u>
Elevation (ft)	<u>-</u>	Slope (ft/ft)	<u>-</u>
Watershed No.	<u>15-A</u>	Chapter 93 Class.	<u>CWF, MF</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>-</u>		
Source(s) of Impairment	<u>-</u>		
TMDL Status	<u>-</u>	Name	<u>-</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>Pennsylvania - Canada Border</u>		
PWS Waters	<u>Lake Erie</u>	Flow at Intake (cfs)	<u>N/A</u>
PWS RMI	<u>N/A</u>	Distance from Outfall (mi)	<u>42.0</u>

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.

No modeling was performed for this NPDES Permit renewal as septic tank/sand filter systems are capable of meeting CBOD5 and TSS averages of 10 mg/l, which are less than the inputs of the WQ model.

To comply with the SOP for New and Reissuance SFTF Individual NPDES Permits, and based on the eDMR data, the following changes were made:

- The measurement frequency for flow was changed from 1/week to 1/month.
- The measurement frequency for pH was changed from 1/week to 1/year.

- The Total Residual Chlorine (TRC) limits were replaced with monitoring, and the monitoring frequency was changed from 1/week to 1/month.
- The CBOD5 limits were changed to BOD5 limits and reduced to 10 mg/l monthly average and 20 mg/l instantaneous maximum. The measurement frequencies for CBOD5 (now BOD5) were changed from 2/month to 1/month.
- The TSS limits were reduced to 10 mg/l monthly average and 20 mg/l instantaneous maximum. The measurement frequencies for TSS were changed from 2/month to 1/month.
- The measurement frequency for Fecal Coliform was changed from 2/month to 1/month.
- The monitoring frequency for Total Phosphorus was reduced from 2/month to 1/year.
- The limits for DO and NH3-N were removed.

Anti-Backsliding exemption:

Under 40 CFR §122.44(l)(i)(B)(1), information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

Compliance History

DMR Data for Outfall 001 (from June 1, 2018 to May 31, 2019)

Parameter	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18
Flow (MGD) Average Monthly	0.001	0.001	0.0012	0.0009	0.001	0.0009	0.0012	0.0009	0.001	0.0008	0.0009	0.0009
pH (S.U.) Minimum	7.4	6.6	7.2	7.4	6.7	6.5	7.2	7.0	7.3	7.1	7.2	7.1
pH (S.U.) Maximum	8.1	7.7	7.3	7.9	7.7	7.4	7.7	7.5	7.5	7.4	7.6	7.7
DO (mg/L) Minimum	5.7	6.2	7.3	6.7	6.9	6.8	5.2	6.0	10.0	6.9	6.3	8.4
TRC (mg/L) Average Monthly	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
TRC (mg/L) Instantaneous Maximum	0.3	0.4	0.3	0.4	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3
CBOD5 (mg/L) Average Monthly	< 4.0	< 4	< 4	< 4	< 4	< 4	4	4	< 4.0	< 4.0	< 4	< 4.0
TSS (mg/L) Average Monthly	5	< 5	5	< 5	< 5	< 5	< 5	< 18	< 5	< 5	4	< 5
Fecal Coliform (CFU/100 ml) Geometric Mean	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1
Ammonia-Nitrogen (mg/L) Average Monthly	0.8	0.8	2.3	1.3	< 0.9	< 0.3	0.3	0.7	1.4	1.6	< 0.5	< 0.3
Total Phosphorus (mg/L) Average Monthly	0.7	0.6	0.6	0.2	1.2	1.6	0.9	0.7	0.3	0.3	0.7	0.3

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/year	Grab
TRC	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab
BOD5	XXX	XXX	XXX	10.0	XXX	20	1/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	1.0 Annl Avg	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001, after disinfection.

Flow and TRC are monitor only. The limits for pH are technology-based on Chapter 93.7. The limits for BOD₅ and Total Suspended Solids are technology-based on the SOP for SFTFs. The limits for Fecal Coliform are technology-based on Chapter 92a.47. The limits for Total Phosphorus are technology-based on the 1969 International Joint Committee (IJC) agreement for Lake Erie.