

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0221643
APS ID 983003
Authorization ID 1255492

Applicant and Facility Information

Applicant Name	<u>Sligo Borough Authority</u>	Facility Name	<u>Sligo Borough STP</u>
Applicant Address	<u>P.O Box 241</u> <u>Sligo, PA 16255-0241</u>	Facility Address	<u>Limestone Flat Road</u> <u>Sligo, PA 16255</u>
Applicant Contact	<u>Ralph Myers</u>	Facility Contact	<u></u>
Applicant Phone	<u>(814) 745-2074</u>	Facility Phone	<u></u>
Client ID	<u>119111</u>	Site ID	<u>493879</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Sligo Borough</u>
Connection Status	<u>No Limitations</u>	County	<u>Clarion</u>
Date Application Received	<u>December 12, 2018</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>December 31, 2018</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of a NPDES Permit for an existing discharge of treated sewage from a POTW.</u>		

Summary of Review

There are no proposed changes to discharge quality or quantity to the discharge as part of this permit renewal.

This renewal is proposing to continue existing monitoring requirements for AMD Metals identified in the Licking Creek TMDL. Therefore, the EPA permit review waiver is in effect.

There are currently no open violations listed in EFACTS for this permittee (10/02/2019).

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		Adam J. Pesek, 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>.11</u>
Latitude	<u>41° 6' 50.6"</u>	Longitude	<u>-79° 29' 551.2"</u>
Quad Name	<u></u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Mineral Run</u>	Stream Code	<u>49308</u>
NHD Com ID	<u>102671753</u>	RMI	<u>0.12</u>
Drainage Area	<u>1.85 mi²</u>	Yield (cfs/mi ²)	<u>0.0444</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.08214</u>	Q ₇₋₁₀ Basis	<u>USGS #03029400</u>
Elevation (ft)	<u>1105</u>	Slope (ft/ft)	<u>0.000921</u>
Watershed No.	<u>17-B</u>	Chapter 93 Class.	<u>CWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Metals, PH</u>		
Source(s) of Impairment	<u>ACID MINE DRAINAGE</u>		
TMDL Status	<u>Final – 04/09/2009</u>	Name	<u>Licking Creek</u>
Background/Ambient Data		Data Source	
pH (SU)	<u>7.0</u>	Default	<u></u>
Temperature (°C)	<u>20</u>	Default (CWF)	<u></u>
Hardness (mg/L)	<u></u>		<u></u>
Other: NH ₃ -N	<u>0.1</u>	Default	<u></u>
Nearest Downstream Public Water Supply Intake	<u>Parker Area Water Authority</u>		
PWS Waters	<u>Allegheny River</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>83.8</u>	Distance from Outfall (mi)	<u>24</u>

Changes Since Last Permit Issuance:

Other Comments: The discharge still qualifies for only having to meet secondary treatment standards under Pa. Code 25 Chapter 95.5 because the last stream survey on Mineral Run showed aquatic life did not exist and no significant improvements to the watershed are known to have occurred nor that are planned in the near future to improve water quality.

Treatment Facility Summary				
Treatment Facility Name: Sligo Borough STP				
WQM Permit No.		Issuance Date		
363S21		8/18/1963		
1695403		2/07/1996		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Activated Sludge	Ultraviolet	0.11
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.11	220	Not Overloaded	Aerobic Digestion	Landfill

Changes Since Last Permit Issuance:

Other Comments:

Compliance History

DMR Data for Outfall 001 (from September 1, 2018 to August 31, 2019)

Parameter	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18
Flow (MGD) Average Monthly	0.064	0.075	0.082	0.071	0.068	0.053	0.057	0.046	0.051	0.069	0.041	0.038
Flow (MGD) Daily Maximum	0.099	0.099	0.099	0.095	0.107	0.088	0.085	0.092	0.084	0.090	0.106	0.089
pH (S.U.) Minimum	6.4	6.6	6.4	6.4	6.6	6.4	6.6	6.7	6.6	6.7	6.7	6.7
pH (S.U.) Maximum	6.7	6.9	6.8	6.7	6.8	6.7	6.9	6.9	6.9	6.9	6.9	7.1
DO (mg/L) Minimum	7.6	7.2	7.2	7.7	7.4	7.4	7.6	7.6	7.7	7.7	7.7	7.6
CBOD5 (lbs/day) Average Monthly	1.7	6.3	5.2	6.3	4.4	5.0	2.8	1.17	1.3	1.82	1.1	1.9
CBOD5 (lbs/day) Weekly Average	3.1	13.5	8.5	4.9	7.1	9.6	3.9	3.3	1.6	3.1	2.2	3.1
CBOD5 (mg/L) Average Monthly	3.2	5.4	3.3	9	9.5	12	5.4	3.4	3.5	3.5	4.4	6.9
CBOD5 (mg/L) Weekly Average	3.8	11.1	3.9	8.6	13.1	20	6.9	5	5	4.6	8.1	13.4
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	70	121	109	76.8	126	76.5	32.9	50	40.7	85.7	50	32.7
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	104	235	135	140	190	144	50	124	49	142	201	41.7
BOD5 (mg/L) Raw Sewage Influent Average Monthly	543	273	162	131	303	174	72.6	135	101	85.7	157	103
TSS (lbs/day) Average Monthly	5.6	6.3	5.2	27.4	6.0	5.2	6.8	3.8	2.9	6.48	2.0	16.1
TSS (lbs/day) Raw Sewage Influent Average Monthly	105	135	108	99.8	179	103	49	41.8	48.7	49.4	44.8	53.2

**NPDES Permit Fact Sheet
Sligo Borough STP**

NPDES Permit No. PA0221643

TSS (lbs/day) Raw Sewage Influent Daily Maximum	150	281	222	203	303	243	83	67	61	79	62	75.5
TSS (lbs/day) Weekly Average	11.4	13.5	8.5	16.4	10.1	10.5	9.7	12.0	7.3	18.0	4.0	5.3
TSS (mg/L) Average Monthly	9.5	9.5	8.5	27	206	23.7	13.7	8.6	8	12.8	6.0	12.5
TSS (mg/L) Raw Sewage Influent Average Monthly	206	324	143	167	433	161	111	213	121	97	210	162
TSS (mg/L) Weekly Average	14	20	17	29.6	31	35	17	18	22	15	10.0	20
Fecal Coliform (CFU/100 ml) Geometric Mean	3.1	3.1	2.1	1	172	2.9	4.5	1.3	1.7	1.0	1.0	14.5
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	100	100	47	1	365	73	435	56	10	1.0	1.0	242
UV Transmittance (%) Average Monthly	99	98	99	99	99	99	99	100	99	100	100	100
Total Nitrogen (lbs/day) Average Quarterly			11.8			7.5			12.1			8.7
Total Nitrogen (mg/L) Average Quarterly			21.8			23.8			17.8			33.7
Ammonia (lbs/day) Average Quarterly			10.5			6.6			0.88			7.3
Ammonia (mg/L) Average Quarterly			19.5			21.2			12.9			31.5
Total Phosphorus (lbs/day) Average Quarterly			0.042			0.011			0.33			0.33
Total Phosphorus (mg/L) Average Quarterly			0.079			0.37			0.49			1.29

**NPDES Permit Fact Sheet
Sligo Borough STP**

NPDES Permit No. PA0221643

MONITORING START DATE	MONITORING END DATE	PARAMETER	LOAD UNITS	LOAD 1 VALUE	LOAD 1 SBC	CONC UNITS	CONC 2 VALUE	CONC 2 SBC
01/01/2014	12/31/2014	Aluminum, Total	lbs/day	0.026	Annual Average	mg/L	0.1	Annual Average
01/01/2015	12/31/2015	Aluminum, Total	lbs/day	0.036	Annual Average	mg/L	0.20	Annual Average
01/01/2016	12/31/2016	Aluminum, Total	lbs/day	0.02	Annual Average	mg/L	0.10	Annual Average
01/01/2017	12/31/2017	Aluminum, Total	lbs/day	0.06	Annual Average	mg/L	0.19	Annual Average
01/01/2018	12/31/2018	Aluminum, Total	lbs/day	0.068	Annual Average	mg/L	0.10	Annual Average
01/01/2014	12/31/2014	Iron, Total	lbs/day	0.051	Annual Average	mg/L	0.14	Annual Average
01/01/2015	12/31/2015	Iron, Total	lbs/day	0.040	Annual Average	mg/L	0.22	Annual Average
01/01/2016	12/31/2016	Iron, Total	lbs/day	0.06	Annual Average	mg/L	0.29	Annual Average
01/01/2017	12/31/2017	Iron, Total	lbs/day	0.99	Annual Average	mg/L	2.88	Annual Average
01/01/2018	12/31/2018	Iron, Total	lbs/day	1.07	Annual Average	mg/L	1.57	Annual Average
01/01/2014	12/31/2014	Manganese, Total	lbs/day	0.07	Annual Average	mg/L	0.192	Annual Average
01/01/2015	12/31/2015	Manganese, Total	lbs/day	0.054	Annual Average	mg/L	0.295	Annual Average
01/01/2016	12/31/2016	Manganese, Total	lbs/day	0.14	Annual Average	mg/L	0.71	Annual Average
01/01/2017	12/31/2017	Manganese, Total	lbs/day	0.050	Annual Average	mg/L	1.44	Annual Average
01/01/2018	12/31/2018	Manganese, Total	lbs/day	0.013	Annual Average	mg/L	1.65	Annual Average

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>0.11</u>
Latitude <u>41° 6' 50.60"</u>	Longitude <u>-79° 29' 51.20"</u>
Wastewater Description: <u>Sewage Effluent</u>	

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
CBOD ₅	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Comments: Chlorine is not used for disinfection and so the TRC limit is not necessary.

Water Quality-Based Limitations

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
N/A			

Comments: No water quality modeling was conducted because the discharge is to a stream with no aquatic life and there are no known projects that have occurred or are planned in the near future to improve the water quality in the receiving stream (See Pa. Code 25 Chapter 95.5).

Best Professional Judgment (BPJ) Limitations

Comments: A dissolved oxygen limit of a daily minimum of 4.0 mg/l, and monitoring for ammonia nitrogen, total nitrogen, total phosphorus and UV transmittance was placed in the permit in accordance with the Department's SOP entitled "Establishing Effluent Limitations for Individual Sewage Permits." Monitoring for aluminum, total iron, and manganese is being included since these are parameters with waste load allocations in the Licking Creek TMDL and no waste load allocations were developed for this discharge due to lack of data.

Anti-Backsliding

N/A

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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	1/day	Grab
CBOD5	22.9	36.7	XXX	25.0	40.0	50	1/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TSS	27.5	41.3	XXX	30.0	45.0	60	1/week	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
UV Transmittance (%)	XXX	XXX	XXX	Report	XXX	XXX	1/day	Recorded
Total Nitrogen	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Ammonia	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Phosphorus	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite

Outfall 001 , Continued (from 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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Total Aluminum	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	24-Hr Composite
Total Iron	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	24-Hr Composite
Total Manganese	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	24-Hr Composite

Compliance Sampling Location: Outfall 001 (after disinfection)

Other Comments: