

Application Type Renewal  
Facility Type Municipal  
Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0223042  
APS ID 1013078  
Authorization ID 1308500

**Applicant and Facility Information**

Applicant Name	<u>Farmington Township</u>	Facility Name	<u>Farmington Township STP Clarion</u>
Applicant Address	<u>P.O. Box 148, 32691 Route 66</u> <u>Leeper, PA 16233-0148</u>	Facility Address	<u>191 Fickenworth Lane</u> <u>Leeper, PA 16233</u>
Applicant Contact	<u>Robin Khale</u>	Facility Contact	<u>Dick Davis (Operator)</u>
Applicant Phone	<u>(814) 744-8523</u>	Facility Phone	<u>(814) 229-1209</u>
Client ID	<u>116000</u>	Site ID	<u>532057</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Farmington Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Clarion</u>
Date Application Received	<u>March 9, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>March 16, 2020</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of an NPDES Permit for an existing discharge of treated sewage from a POTW.</u>		

**Summary of Review**

This facility treats domestic municipal sewage from Farmington Township, Clarion County. The plant does not have any industrial users, and it does not accept hauled in waste.

No changes to discharge quality or quantity are proposed as part of this permit renewal.

There are currently seven open violations listed in EFACTS for this permittee under the Safe Drinking Water Program (10/13/2022).

Sludge use and disposal description and location(s): Hauled offsite to a Department-approved landfill

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 Adam J. Pesek, E.I.T. / Project Manager	October 13, 2022
X		Vacant / Environmental Program Manager	Okay to Draft JCD 10/17/2022

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.1</u>
Latitude	<u>41° 22' 58"</u>	Longitude	<u>-79° 20' 6.86"</u>
Quad Name	<u>Tylersburg</u>	Quad Code	<u>03061</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Licking Creek (CWF)</u>	Stream Code	<u>49465</u>
NHD Com ID	<u>102667701</u>	RMI	<u>7.0</u>
Drainage Area	<u>2.41</u>	Yield (cfs/mi <sup>2</sup> )	<u>0.050</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.121</u>	Q <sub>7-10</sub> Basis	<u>USGS Streamstats regression</u>
Elevation (ft)	<u>1491</u>	Slope (ft/ft)	<u></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, SILTATION</u>		
Source(s) of Impairment	<u>ACID MINE DRAINAGE, GRAZING IN RIPARIAN OR SHORELINE ZONES, PETROLEUM/NATURAL GAS ACTIVITIES</u>		
TMDL Status	<u>Final</u>	Name	<u>Deer Creek (Clarion)</u>
Background/Ambient Data		Data Source	
pH (SU)	<u>6.0</u>	Acid Stream	<u></u>
Temperature (°C)	<u>20</u>	Default (CWF)	<u></u>
Hardness (mg/L)	<u></u>		<u></u>
Other:	<u></u>		<u></u>
Nearest Downstream Public Water Supply Intake	<u>Parker City Water System</u>		
PWS Waters	<u>Allegheny River</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>85.0</u>	Distance from Outfall (mi)	<u>Approx 45</u>

Changes Since Last Permit Issuance:

Other Comments: The receiving stream is considered "dead" due to acid mine drainage. This was last verified by the Department aquatic biologists on 5/28/2015. Although the watershed is included in an AMD TMDL, there is no known projects planned that would improve water quality in the vicinity of this discharge within the next permit cycle.

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Farmington Township STP Clarion				
<b>WQM Permit No.</b>		<b>Issuance Date</b>		
1600408		5/07/2001		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary with Chemical Addition	Extended Aeration	Hypochlorite	0.1
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.1	220	Not Overloaded	Aerobic Digestion	Landfill

Changes Since Last Permit Issuance:

Other Comments:

<b>Compliance History</b>	
<b>Summary of DMRs:</b>	Fecal coliform effluent violations in July and August 2020, TSS effluent violations in October 2020, and a TRC effluent violation in July 2022.
<b>Summary of Inspections:</b>	<p>The last two inspection reports (2022 and 2021) indicated that there was record keeping, reporting and sample collection that need improvement. The last inspection report indicated improvements in all these areas from the current operator.</p> <p>The inspection reports also continue to suggest the sludge in the reed drying beds need to be removed and disposed of.</p>

Other Comments:

Compliance History

DMR Data for Outfall 001 (from September 1, 2021 to August 31, 2022)

Parameter	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21
Flow (MGD) Average Monthly	0.0331	0.0315	0.036	0.0537	0.0667	0.0747	0.0865	0.0443	0.0565	0.0415	0.0528	0.046
Flow (MGD) Weekly Average	0.038	0.0349	0.046	0.0947	0.0851	0.1038	0.1231	0.0533	0.0657	0.0528	0.0763	0.0671
pH (S.U.) Minimum	7.0	6.5	7.0	6.7	6.8	6.4	6.2	6.6	6.8	7.0	6.1	6.0
pH (S.U.) Maximum	7.9	7.9	7.5	7.4	7.3	7.1	7.2	7.3	7.3	7.3	7.5	7.5
TRC (mg/L) Average Monthly	0.11	0.14	0.04	0.03	0.12	0.06	0.05	0.03	0.05	0.03	0.06	0.04
TRC (mg/L) Instantaneous Maximum	0.3	2.24	0.1	0.06	0.3	0.43	0.1	0.07	0.05	0.05	0.1	0.23
CBOD5 (lbs/day) Average Monthly	0.9	1	1	2	2	3	2	2	3	2	2	2
CBOD5 (lbs/day) Weekly Average	1	2	2	2	4	5	4	3	4	3	3	2
CBOD5 (mg/L) Average Monthly	3	5	4	4	4	5	6	6	6	5	6	5
CBOD5 (mg/L) Weekly Average	3.5	7.1	5.7	5.4	4.1	5.6	10	7.6	8.3	6.5	7.7	8
BOD5 (lbs/day) Raw Sewage Influent   Average Monthly	59	59	75	64	74	52	84	70	57	48	55	81
BOD5 (mg/L) Raw Sewage Influent   Average Monthly	220	219	207	164	138	89	148	193	120	133	157	253
TSS (lbs/day) Average Monthly	2	2	3	4	5	4	3	2	10	5	6	4
TSS (lbs/day) Raw Sewage Influent   Average Monthly	94	84	124	80	111	51	106	88	61	76	77	103
TSS (lbs/day) Weekly Average	3	3	7	7	12	6	5	3	14	8	9	7

**NPDES Permit Fact Sheet  
Farmington Township STP Clarion**

**NPDES Permit No. PA0223042**

TSS (mg/L) Average Monthly	6	9	9	10	8	7	8	6	5	14	17	13
TSS (mg/L) Raw Sewage Influent   Average Monthly	355	313	338	208	213	90	173	248	131	227	219	319
TSS (mg/L) Weekly Average	9	13	11	19	12	9	10	8	7	19	26	22
Fecal Coliform (CFU/100 ml) Geometric Mean	10	10	10	10	10	10	10	10	10	10	10	10
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	10	10	10	10	10	10	10	10	10	10	10	10
Total Nitrogen (mg/L) Average Monthly	15.09	75.22	45.17	31.97	25.67	4.28	65.997	29.34	33.54	34.415	8.68	1.72
Total Phosphorus (mg/L) Average Monthly	7.38	8.7	8.03	4.56	3.72	2.13	3.53	3.63	4.31	4.39	7.15	5.66

**Development of Effluent Limitations**

<b>Outfall No.</b>	001	<b>Design Flow (MGD)</b>	0.1
<b>Latitude</b>	41° 22' 58.00"	<b>Longitude</b>	-79° 20' 6.86"
<b>Wastewater Description:</b> Sewage Effluent			

**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 <sub>5</sub>	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)
E. Coli	Report (No./100 ml)	IMAX	-	92a.61

Comments: Monitoring for E. coli will be placed in the permit in accordance with the Department’s SOP entitled “Establishing Effluent Limitations for Individual Sewage Permits.”

**Water Quality-Based Limitations**

Comments: Under the provisions given in Chapter 95.5(a)(1), secondary treatment standards are suggested for discharges to streams of this state. Therefore, no WQ modeling was conducted.

**Best Professional Judgment (BPJ) Limitations**

Comments: A dissolved oxygen daily minimum limit of 4.0 mg/l and a TRC IMAX limit of 1.6 is placed in the permit in accordance with the Department’s SOP entitled “Establishing Effluent Limitations for Individual Sewage Permits.”

**Other Considerations**

Comments: Monitoring for influent BOD<sub>5</sub> and influent TSS is placed in the permit in accordance with the Department’s SOP entitled “New and Reissuance Individual Sewage NPDES Permit Applications.”

Monitoring for ammonia nitrogen, total nitrogen and total phosphorus is placed in the permit in accordance with the Department’s SOP entitled “Establishing Effluent Limitations for Individual Sewage Permits.”

**Deer Creek Watershed AMD TMDL**

The TMDL does not contain any WLAs for aluminum, total iron, or manganese for this facility. As this facility only treats domestic sewage with no industrial users or hauled in waste, the discharge is not expected to contribute to the AMD impairment. No monitoring or limits for AMD metal parameters will be placed in the proposed permit at this time.

**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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report	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
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	21	33	XXX	25	40	50	1/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TSS	25	38	XXX	30	45	60	1/week	24-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Total Nitrogen	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Ammonia	Report	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Total Phosphorus	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite

Compliance Sampling Location: Outfall 001 (after disinfection)