

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0021776
APS ID 25
Authorization ID 1485227

Applicant and Facility Information

Applicant Name	Fairfield Borough Municipal Authority <u>Adams County</u>	Facility Name	Fairfield STP
Applicant Address	<u>108 West Main Street</u> <u>Fairfield, PA 17320-8330</u>	Facility Address	<u>180 Water Street</u> <u>Fairfield, PA 17320-9216</u>
Applicant Contact	<u>Randall Alexander</u>	Facility Contact	<u>Mark Keller</u>
Applicant Phone	<u>(717) 642-8330</u>	Facility Phone	<u>(717) 642-8246</u>
Client ID	<u>28612</u>	Site ID	<u>246866</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Fairfield Borough</u>
Connection Status	<u>Self-Imposed Connection Prohibition</u>	County	<u>Adams</u>
Date Application Received	<u>May 15, 2024</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>May 17, 2024</u>	If No, Reason	
Purpose of Application	<u>NPDES permit renewal.</u>		

Summary of Review

Keller Engineers, on behalf of the Fairfield Municipal Authority (Authority/Permittee), applied to the Pennsylvania Department of Environmental Protection (DEP) for issuance of the NPDES permit. The permit was reissued on November 14, 2019 and became effective on December 1, 2019. The permit expires on November 30, 2024.

The average annual design flow and hydraulic design capacity is 0.3 MGD, and the organic loading capacity is 625 lbs BOD₅/day. The renewal application indicated the STP receives its 77% from the Est. Pop. Equiv. Fairfield Borough, and 23% Hamiltonban Township.

The WQM Part II permit No. 0176401 amendment was issued on 8/19/2002. The WQM Part II permit No. 0107405 was issued on 3/14/2008.

Sludge use and disposal description and location(s): N/A because sludge hauled by Peck's Septic Service.

Changes from the previous permit: E. Coli monitoring and report requirements will add to the proposed permit.

Based on the review outlined in this fact sheet, it is recommended that the permit be drafted. A public notice of the draft permit will be published in the *Pennsylvania Bulletin* for public comments for 30 days.

Approve	Deny	Signatures	Date
X		<i>Hilaryle</i> Hilary H. Le / Environmental Engineering Specialist	August 30, 2024
X		<i>Maria D. Bebenek for</i> Daniel W. Martin, P.E. / Environmental Engineer Manager	September 30, 2024

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.3
Latitude	39° 47' 9.03"	Longitude	-77° 21' 29.57"
Quad Name	Fairfield	Quad Code	2027
Wastewater Description:	Sewage Effluent		
Receiving Waters	Spring Run (CWF)	Stream Code	58712
NHD Com ID	53320996	RMI	0.38
Drainage Area	2.13 mi. ²	Yield (cfs/mi ²)	0.04
Q ₇₋₁₀ Flow (cfs)	0.092	Q ₇₋₁₀ Basis	USGS StreamStats
Elevation (ft)	582	Slope (ft/ft)	
Watershed No.	13-D	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Name		
Nearest Downstream Public Water Supply Intake	City of Frederick, MD		
PWS Waters	Monocacy River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	Approximate 37.0 miles

Changes Since Last Permit Issuance:

Drainage Area

The discharge is to Spring Run at RMI 0.38. A drainage area upstream of the point of discharge is estimated to be 2.13 sq.mi. using USGS Stream Stats available at <https://streamstats.usgs.gov/ss/>.

Streamflow

USGS Stream Stats produced a Q7-10 flow of 0.092 cfs at the point of discharge. (0.092 cfs/ 2.13 mi.² = 0.04 cfs/mi.²)

Spring Run

Spring Run is a tributary of Middle Creek. Under 25 Pa Code §93.9z, the Middle Creek basin from PA 116 Bridge to PA-MD State Border is designated as cold-water fishes and supports migratory fishes. No special protection water is impacted by this discharge. No Class A Wild Trout fishery is impacted by this discharge. DEP's 2024 integrated water quality report indicates that the discharge is located within a stream segment listed as attaining use(s). No TMDL has been taken into consideration for this review.

Public Water Supply Intake

The fact sheet prepared for the last permit renewal indicates that the nearest downstream water supply intake is the City of Frederick, MD, located approximately 37.3 miles downstream of this discharge. Further, eMapPA currently indicates that the PA-MD border is 8.03 miles downstream of this discharge, with no public water supply withdrawals before that point. Given the distance and nature of the discharge, the discharge is not expected to significantly impact the water supply.

Treatment Facility Summary				
Treatment Facility Name: Fairfield STP				
WQM Permit No.	Issuance Date			
0107405	3/14/2008			
0176401	8/19/2002			
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary With Ammonia Reduction	Activated Sludge	Chlorine With Dechlorination	0.175
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.175	292	Not Overloaded	Drying	Landfill

Changes Since Last Permit Issuance:

Other Comments:

The treatment process, according to the application, is as follows:

Bar Screen → EQ tank → Anoxic tanks (2) → Aeration tanks (2) → Clarifiers (2) → UV Disinfection → Outfall 001 to Spring Run

A sludge digester is available for sludge processing prior to hauled off to the STP operated by the City of Harrisburg.

Chemical used:

Aluminum is used for phosphate precipitation at a rate of 8 gpd.

Biosolids:

The total sewage sludge/biosolids production within the facility for the previous year was 4.92 dry tons.

Industrial/Commercial Users:

The permit application indicated there are no commercial or industrial contributors to the treatment plant.

Compliance History	
Summary of DMRs:	A summary of past 12-month DMR data is presented on the next page.
Summary of Inspections:	<p>4/07/2022 – Mr. Hoy, DEP Water Quality Specialist, conducted a compliance evaluation inspection and noted that effluent at the UV system was clear. No significant violations were identified at the time of inspection. Recommendations: 1. Using a NIST thermometer in the sample fridge. 2. Using flow pacing at effluent composite sampler. 3. Correct Daily Effluent transcription error for September 16, 2021 flow from 0.261 MGD to 0.251 MGD. 4. Submit monthly sludge hauling form and check box if no sludge has been hauled. Field test results were within permit limits.</p> <p>12/23/2020: Mr. Bettinger, DEP Water Quality Specialist, conducted an administrative review of Fairfield STP Chesapeake Bay nutrient monitoring. No significant violations were identified at the time of inspection.</p>
Other Comments:	There is no open violation associated with this facility or permittee.

Other Comments: 

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The table below summarizes the influent/effluent testing results submitted along with the application.

<i>Influent Testing Results</i>			<i>Effluent Testing Results</i>		
Parameter	Min/Max Value	Average Value	Parameter	Min/Max Value	Average Value
BOD ₅ (mg/L)	6.3/295 mg/L	78 mg/L	pH (minimum)	6.7 S.U.	
BOD ₅ (lbs/day)	13/450 lbs/day	115 lbs/day	pH (maximum)	7.8 S.U.	
TSS (mg/L)	6/1956 mg/L	247 mg/L	D.O (minimum)	5.0 mg/L	5.2 mg/L
TSS (lbs/day)	8/3590 lbs/day	363 lbs/day	TRC	N/A mg/L	N/A mg/L
TN (mg/L)	16.2 mg/L	16.2 mg/L	Fecal Coliform	1/2420 No./100mL	246 No./100 mL
TN (lbs/day)	27.0 lbs/day	27.0 lbs/day	CBOD ₅	2.4/9.6 mg/L	4.1 mg/L
TP (mg/L)	1.8 mg/L	1.8 mg/L	TSS	1/21 mg/L	4.7 mg/L
TP (lbs/day)	3.0 lbs/day	3.0 lbs/day	NH ₃ -N	0.11/3.2 mg/L	0.59 mg/L
NH ₃ -N (mg/L)	10.0 mg/L	10.0 mg/L	TN	5.9/18.1 mg/L	9.75 mg/L
NH ₃ -N (lbs/day)	16.7 lbs/day	16.7 lbs/day	TP	0.32/2.5 mg/L	1.4 mg/L
TDS (mg/L)	418 mg/L	418 mg/L	Temp	54/71 F	F
TDS (lbs/day)	697.2 lbs/day	697.2 lbs/day	TKN	0.5/5.6 mg/L	1.42 mg/L
TKN	15.0 mg/L	15.0mg/L	NO ₂ -N + NO ₃ -N	4/6/14.5 mg/L	8.34 mg/L
NO ₂ -N + NO ₃ -N	< 1.2 mg/L	< 1.2 mg/L	TDS	366 mg/L	366 mg/L
			Chloride	30 mg/L	30 mg/L
			Bromide	< 0.2 mg/L	< 0.2 mg/L
			Sulfate	16 mg/L	16 mg/L
			Oil and Grease	< 5.0 mg/L	< 5.0 mg/L
			Total Copper	0.016 mg/L	0.016 mg/L
			Total Lead	< 0.001 mg/L	< 0.001 mg/L
			Total Zinc	0.016 mg/L	0.016 mg/L

Compliance History

DMR Data for Outfall 001 (from July 1, 2023 to June 30, 2024)

Parameter	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23
Flow (MGD) Average Monthly	0.150	0.258	0.395	0.386	0.348	0.409	0.269	0.149	0.137	0.153	0.130	0.127
Flow (MGD) Daily Maximum	0.203	0.431	0.835	0.669	0.486	0.848	0.700	0.467	0.247	0.349	0.249	0.192
pH (S.U.) Instantaneous Minimum	7.0	7.0	7.1	7.1	7.0	7.1	7.1	7.1	7.1	7.0	7.1	6.7
pH (S.U.) Instantaneous Maximum	7.4	7.8	7.7	7.6	7.5	7.6	7.8	7.5	7.6	7.6	7.4	7.4
DO (mg/L) Daily Minimum	5.1	5.2	5.3	6.4	5.2	5.7	5.2	5.1	5.1	5.2	5.2	5.4
CBOD5 (lbs/day) Average Monthly	6	16	16	12	13	14	12	< 6	3.6	3.2	2.9	3.2
CBOD5 (lbs/day) Weekly Average	7	29	18	16	15	27	26	18	5.1	5.4	3.8	4.5
CBOD5 (mg/L) Average Monthly	5.0	9.0	5.2	4.0	4.8	4.0	4.0	< 4.0	3.1	2.5	2.6	2.8
CBOD5 (mg/L) Weekly Average	7.0	18.3	7.0	4.2	5.0	5.3	6.2	< 6.0	3.8	2.6	2.9	3.4
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	69	76	151	324	120	105	95	120	171	115	55	77
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	113	144	231	930	185	214	212	326	293	319	125	92
BOD5 (mg/L) Raw Sewage Influent Average Monthly	59	39	51	124	45	32	57	76	143	70	51	72
TSS (lbs/day) Average Monthly	3	17	16	14	7	11	6	7	4	4	8	5
TSS (lbs/day) Raw Sewage Influent Average Monthly	96	252	364	431	209	253	249	69	427	168	113	381
TSS (lbs/day) Raw Sewage Influent Daily Maximum	164	609	700	1431	395	558	798	143	645	316	358	1068
TSS (lbs/day) Weekly Average	5	31	20	32	10	31	12	23	6	5	13	10

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TSS (mg/L)												
Average Monthly	3.0	10.0	5.0	4.0	3.0	3.0	3.0	4.0	3.0	4.0	8.0	4.0
TSS (mg/L)												
Raw Sewage Influent												
Average Monthly	83	128	101	175	75	108	168	51	371	131	98	363
TSS (mg/L)												
Weekly Average	5.0	20.0	7.0	7.0	4.0	6.0	3.0	7.0	6.0	5.0	15.0	9.0
Fecal Coliform (No./100 ml)												
Geometric Mean	23	237	1023	501	195	224	126	135	85	36	7	9
Fecal Coliform (No./100 ml)												
Instantaneous Maximum	308	727	2420	980	488	2420	488	2420	2420	219	7	86
UV Intensity (mW/cm ²)												
Daily Minimum	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nitrate-Nitrite (mg/L)												
Average Monthly	5.07	< 6.3	< 5.8	< 6.3	< 6.78	< 6.6	5.33	13.3	8.5	8.5	9.3	9.8
Nitrate-Nitrite (lbs)												
Total Monthly	184	< 361	< 580	< 623	< 569	< 651	398	567	267	304	327	334
Total Nitrogen (mg/L)												
Average Monthly	7.8	< 8.9	< 7.26	< 6.86	< 7.8	< 7.8	< 6.68	< 15.14	< 11.57	9.8	10.76	10.86
Total Nitrogen (lbs)												
Total Monthly	277	< 509	< 708	< 677	< 660	< 776	< 478	< 663	< 382	358	379	371
Total Nitrogen (lbs)												
Effluent Net Total Annual										< 5511		
Total Nitrogen (lbs)												
Total Annual										< 5511		
Ammonia (lbs/day)												
Average Monthly	2.0	2.0	0.90	< 0.6	1	1	0.9	2	2.0	0.8	1.0	1.0
Ammonia (mg/L)												
Average Monthly	1.48	0.96	0.27	< 0.19	0.36	0.31	0.44	0.97	1.33	0.64	1.04	0.99
Ammonia (lbs)												
Total Monthly	49	51	27	< 18	30	37	28	57	49	24	37	34
Ammonia (lbs)												
Total Annual										369		
TKN (mg/L)												
Average Monthly	2.7	< 2.6	1.43	< 0.56	< 1	< 1.2	< 1.4	< 1.86	< 3.12	1.3	1.44	1.09
TKN (lbs)												
Total Monthly	93	< 148	128	< 53	< 90	< 124	< 81	57	< 115	54	51	37
Total Phosphorus (mg/L)												
Average Monthly	2.0	1.7	1.06	0.91	1.18	0.86	1.16	2.1	1.8	1.8	1.7	1.15
Total Phosphorus (lbs)												
Total Monthly	69	94	100	87	100	83	75	95	60	63	62	41

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Total Phosphorus (lbs)										783		
Effluent Net Total Annual												
Total Phosphorus (lbs)										783		
Total Annual												

Existing Effluent Limitations and Monitoring Requirements

The tables below summarize effluent limits and monitoring requirements specified in the current permit renewal.

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	Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/day	Grab
DO	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
CBOD5	63	100	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	75	113	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 Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Ammonia Nov 1 - Apr 30	11	XXX	XXX	4.5	XXX	9	1/week	24-Hr Composite
Ammonia May 1 - Oct 31	3.8	XXX	XXX	1.5	XXX	3	1/week	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite

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Parameter ⁽¹⁾	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Ammonia---N	Report	Report	XXX	Report	XXX	1/week	24-Hr Composite
Kjeldahl---N	Report	XXX	XXX	Report	XXX	1/week	24-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	1/week	24-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	1/week	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	1/week	24-Hr Composite
Net Total Nitrogen	Report	7,306	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	Report	974	XXX	XXX	XXX	1/month	Calculation

Development of Effluent Limitations

Outfall No. 001
Latitude 39° 47' 9.03"
Wastewater Description: Sewage Effluent

Design Flow (MGD) .3
Longitude -77° 21' 29.57"

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)

Comments: [REDACTED]

Water Quality-Based Limitations

Ammonia (NH₃-N):

NH₃N calculations are based on the Department's Implementation Guidance of Section 93.7 Ammonia Criteria, dated 11/4/97 (ID No. 391-2000-013). The following data is necessary to determine the in-stream NH₃-N criteria used in the attached WQM 7.0 computer model of the stream:

* Discharge pH = 7.0 (Default)
 * Discharge Temperature = 20°C (Default)
 * Stream pH = 7.0 (Default)
 * Stream Temperature = 20°C (Default)
 * Background NH₃-N = 0 mg/L (Default)

Analysis Results WQM 7.0

Hydrodynamics		NH ₃ -N Allocations		D.O. Allocations		D.O. Simulation		Effluent Limitations																	
RMI	Discharge Name	Permit Number Disc Flow (mgd)																							
0.38	Fairfield STP	PA0021776 0.3000																							
<table border="1"> <thead> <tr> <th>Parameter</th> <th>Effluent Limit 30 Day Average (mg/L)</th> <th>Effluent Limit Maximum (mg/L)</th> <th>Effluent Limit Minimum (mg/L)</th> </tr> </thead> <tbody> <tr> <td>CBOD₅</td> <td>25</td> <td></td> <td></td> </tr> <tr> <td>NH₃-N</td> <td>1.5</td> <td>3</td> <td></td> </tr> <tr> <td>Dissolved Oxygen</td> <td></td> <td></td> <td>5</td> </tr> </tbody> </table>										Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)	CBOD ₅	25			NH ₃ -N	1.5	3		Dissolved Oxygen			5
Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)																						
CBOD ₅	25																								
NH ₃ -N	1.5	3																							
Dissolved Oxygen			5																						
Record: 1 of 1 < Back Next > No Filter Search																									
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Regarding NH₃-N limits, the attached computer printout of the WQM 7.0 stream model (version 1.1) indicates that a limit of 1.5 mg/L as a monthly average and 3.0 mg/L instantaneous maximum (IMAX) are necessary to protect the aquatic life from toxicity effects at the point of discharge. Therefore, the existing limits of 1.5 mg/L monthly average & 3.0 mg/L IMAX are same and will remain in the proposed permit. The existing winter average monthly limit of 4.5 mg/L & IMAX limit of 9.0 mg/L will remain in place. Recent DMRs and inspection reports show that the facility has been consistently achieving these limits. Mass limits are calculated as follows:

Summer average monthly mass limit: 1.5 mg/L x 0.3 MGD x 8.34 = 3.75 (3.8) lbs/day
Winter average monthly mass limit: 4.5 mg/L x 0.3 MGD x 8.34 = 11.26 (11.0) lbs/day

Dissolved Oxygen (D.O.):

The minimum D.O. of 5.0 mg/L is required per 25 Pa. Code § 93.7. It is recommended that this limit be maintained in the proposed permit to ensure the protection of water quality standards. This approach is consistent with DEP's current Standard Operating Procedure (SOP) No. BCW-PMT-033, version 2.0 revised February 5, 2024, and has been applied to other point source dischargers throughout the state.

pH:

The effluent discharge pH should remain above 6.0 and below 9.0 standard units according to 25 Pa. Code § 95.2(1).

Carbonaceous Biochemical Oxygen Demand (CBOD₅):

The attached computer printout of the WQM 7.0 stream model (ver. 1.1) indicates that a monthly average limit of 25.0 mg/L, or secondary treatment, is adequate to protect the water quality of the stream. Therefore, the existing permit 25.0 mg/L as AML, 40.0 mg/L as weekly average limit (AWL), & 50.0 mg/L as IMAX are more stringent and will remain in the proposed permit. Recent DMRs and inspection reports show that the facility has typically been achieving concentrations below this limit. Mass limits are calculated as follows:

Summer Average monthly mass limit: 25.0 mg/L x 0.3 MGD x 8.34 = 62.55 (63.0) lbs/day
Summer Average weekly mass limit: 40.0 mg/L x 0.3 MGD x 8.34 = 100.08 (100.0) lbs/day

These values are rounded down to 63.0 lbs/day and 100.0 lbs/day, respectively. The minimum monitoring frequency will remain the same as 1/week.

Total Suspended Solids (TSS):

The existing technology-based limits of 30.0 mg/L average monthly, 45.0 mg/L weekly average, and 60.0 mg/L IMAX will remain in the proposed permit based on the minimum level of effluent quality attainable by secondary treatment based on 25 Pa. Code § 92a.47. Recent DMRs and inspection reports show that the facility has been consistently achieving these limits. Mass limits are calculated as follows:

Average monthly mass limit: 30.0 mg/L x 0.3 MGD x 8.34 = 75.06 (75.0) lbs/day
Average weekly mass limit: 45.0 mg/L x 0.3 MGD x 8.34 = 112.59 (113.0) lbs/day

The average monthly and weekly average mass loadings will be rounded down to 75.0 lbs/day and 113.0 lbs/day, respectively. The minimum monitoring frequency will remain the same as 1/week.

Fecal Coliform:

The recent coliform guidance in 25 Pa. Code § 92a.47.(a)(4) requires a summer technology limit of 200/100 ml as a geometric mean and an instantaneous maximum not greater than 1,000/100ml and § 92a.47.(a)(5) requires a winter limit of 2,000/100ml as a geometric mean and an instantaneous maximum not greater than 10,000/100ml.

E. Coli:

As recommended by DEP's SOP No. BCW-PMT-033, version 2.0 revised February 5, 2024, a routine monitoring for E. Coli will be included in the proposed permit under 25 Pa. Code § 92a.61. This requirement applies to all sewage dischargers greater than 0.002 MGD in their new and reissued permits. A monitoring frequency of 1/quarter will be included in the permit to be consistent with the recommendation from this SOP.

Raw Sewage Influent Monitoring:

As a result of negotiation with EPA, influent monitoring of TSS and BOD₅ are required for any POTWs; therefore, influent sampling of BOD₅ and TSS will remain in the proposed permit. A 24-hr composite sample type will be required to be consistent with the proposed sampling frequency for TSS and BOD₅ in the effluent.

Total Phosphorus:

The existing permit average monthly TP concentration report will remain in the proposed permit.

Stormwater:

There is no known stormwater outfall associated with this facility.

UV:

The UV system daily monitor and report the UV light intensity (mW/cm²) will be remain in the proposed permit.

Chesapeake Bay:

In the Phase 3 WIP Wastewater Supplement revised on July 29, 2022, Attachment C, page 28 of this document shows that Fairfield STP has been allocated 7,306 lbs/year of TN and 974 lbs/year of TP. This approach is consistent with the Chesapeake Bay TMDL, based on the actual performance data previously evaluated by the Department. Since the permittee is easily capable of achieving compliance with these loads, the Department determines that no "compliance schedule" for the requirements associated with the Chesapeake Bay Strategy is necessary. Accordingly, the Chesapeake Bay nutrient existing limitations and monitoring requirements will remain in the proposed permit.

This facility is currently a significant discharger. Therefore, the facility's waste load allocation (WLA) will be tracked under an individual WLA as a significant discharger in the Phase 3 WIP Wastewater Supplement. Monitoring frequency for TN constituents will remain in the proposed permit.

Phase 3 WIP Wastewater Supplement
Revised, July 29, 2022

ATTACHMENT C
NON-SIGNIFICANT DISCHARGERS WITH CAP LOADS IN NPDES PERMITS

NPDES Permit No.	Facility	Latest Permit Issuance Date	Permit Expiration Date	Cap Load Compliance Start Date	TN Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	TN Delivery Ratio	TP Delivery Ratio
PA0008281	PPL BRUNNER ISLAND INDUSTRIAL WASTES	7/27/2018	7/31/2023	10/1/2009	0	0	0.836	0.486
PA0020851	HYNDMAN STP	1/31/2020	1/31/2025	10/1/2013	7,306	974	1.00	0.499
PA0021652	KREAMER MUNI AUTH SEW STP	3/11/2015	3/31/2020	4/1/2015	7,306	974	0.748	0.330
PA0021776	FAIRFIELD STP	11/14/19	11/30/2024	10/1/2012	7,306	974	0.540	0.681
PA0021849	MILLERSTOWN STP	6/22/2016	5/31/2021	10/1/2013	6,697	974	0.0688	0.359
PA0024651	ATGLEN BOROUGH STP	4/13/2022	4/30/2027	10/1/2014	7,306	974	0.922	0.778
PA0027952	SUNOCO INC – LAWN SERVICE PLAZA	11/29/2021	11/30/2026	4/1/2009	-	304	0.590	0.448
PA0036846	NEW BERLIN BORO MUNI AUTH WTP	3/12/2021	3/31/2026	10/1/2016	7,020	819	0.812	0.442
PA0043494	LOYSVILLE STP	4/27/2022	4/30/2027	TBD	7,306	314	0.690	0.343
PA0044598	HARRISBURG AIRPORT STP	8/18/2015	8/31/2020	9/1/2015	7,306	974	0.837	0.503
PA0061123	MOSCOW SEW AUTH STP	1/25/2017	1/31/2022	10/1/2013	9,740	1,217	0.395	0.204
PA0065145	DUNN LAKE LLC	12/3/2018	12/31/2023	5/1/2013	0	0	0.098	0.013
PA0065307	COMM ENV SYS LANDFILL	3/13/2014	11/30/2016	10/1/2013	0	0	0.471	0.403
PA0080756	HERSHEY FARM MOTOR LODGE	2/27/2020	2/28/2025	10/1/2012	7,306	852	0.590	0.553
PA0080799	NEWBURG HOPEWELL JOINT AUTHORITY	10/5/2017	10/31/2022	11/1/2017	3380	325	0.707	0.444
PA0081264	PENN NATL HORSE RACE TRACK AND HOLLYWOOD CASINO – WWTP	10/22/2018	10/31/2023	2/1/2014	5,601	700	0.691	0.409
PA0082279	SPRING CREEK STP	9/23/2015	9/20/2020	10/1/2015	7,306	974	0.766	0.351
PA0083607	UNION TWP LEB CO LICKDALE STP	4/26/2016	4/30/2021	10/1/2012	7,306	974	0.722	0.434
PA0111422	THOMPSONSTOWN STP	9/22/2015	9/30/2020	10/1/2015	7,032	974	0.816	0.392
PA0113093	CHRIST WESLEYAN CHURCH SEWER SYSTEM	8/18/2017	8/31/2022	9/1/2020	152	24	0.754	0.461
PA0021202	EAST BERLIN JOINT AUTHORITY – STP	5/7/2021	5/31/2026	10/1/2015	7,306	974	0.684	0.189
PA0232513	KELLY CROSSROADS SANI SEW SYS	8/10/2015	8/31/2020	9/1/2015	0	0	0.720	0.408
PA0232751	POTTER MILLS CENTRAL TREATMENT SYSTEM	8/31/2021	8/31/2026	10/1/2016	0	0	0.747	0.517

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WETT:

Minor facilities and facilities without a formal EPA approved pretreatment program are exempted from WETT

Additional Considerations

Flow Monitoring

The requirement to monitor the volume of effluent will remain in the permit per 40 CFR § 122.44(i)(1)(ii).

Antidegradation Requirements

All effluent limitations and monitoring requirements have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected.

Antibacksliding Requirements

Unless specified otherwise throughout this fact sheet, effluent limits for all pollutants of concern have been developed at least as stringent as effluent limits written in the existing permit renewal. This approach is consistent with 40 CFR §122.44(l)(1).

WQM 7.0:

The following data were used in the attached computer model (WQM 7.0) of the stream:

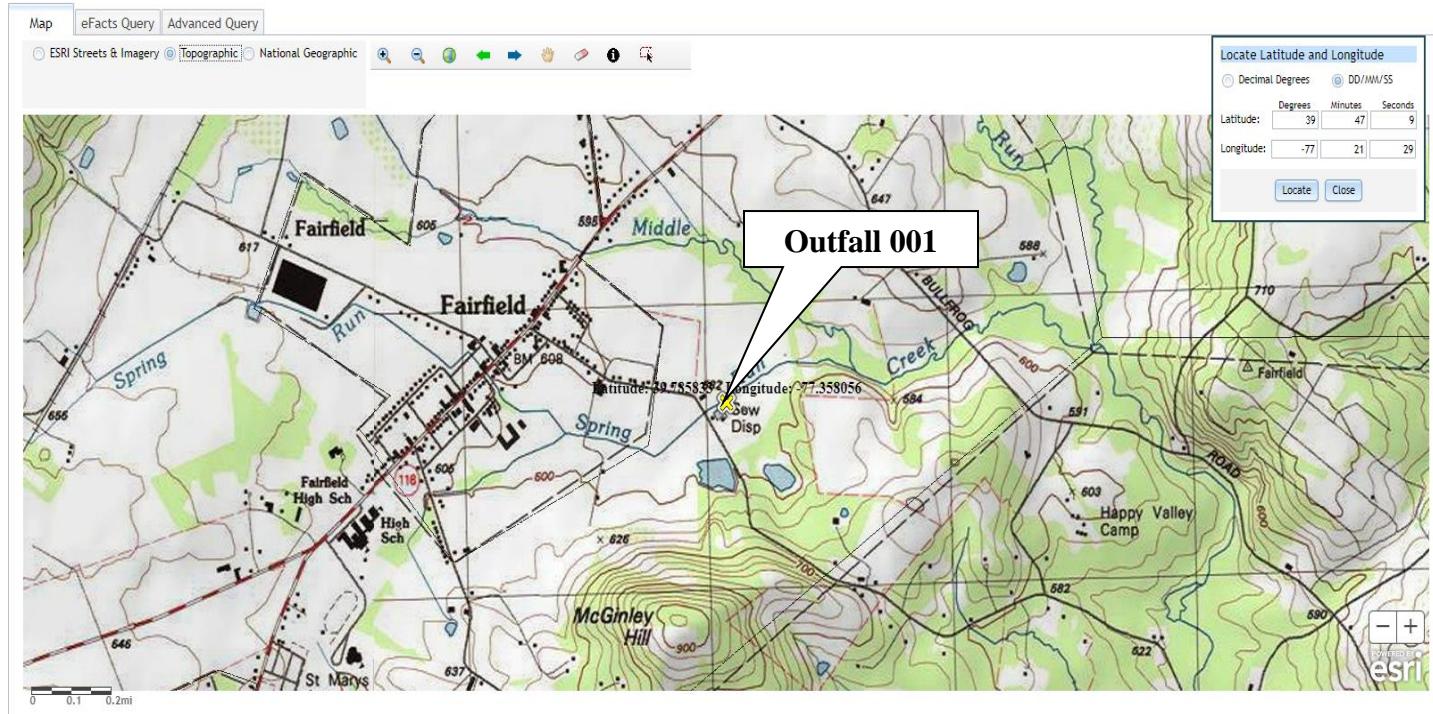
*	Discharge pH	=	7.0	(Default)
*	Discharge Temperature	=	20°C	(Default)
*	Stream pH	=	7.0	(Default)
*	Stream Temperature	=	20°C	(Default)
*	Background NH ₃ -N	=	0 mg/L	(Default)

Node 1: Outfall 001 Spring Run (58712)

Elevation: 582 ft (USGS National Map Viewer)
Drainage Area: 2.13 mi² (USGS PA StreamStats)
River Mile Index: 0.380 (PA DEP eMapPA)
Low Flow Yield: 0.04 cfs/mi²
Discharge Flow: 0.3 mgd (NPDES Application)

Node 2: Just after confluence of Spring Run with UNT 58713

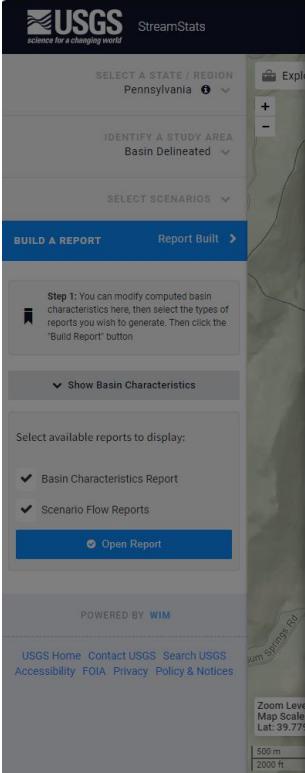
Elevation: 576 ft (USGS National Map Viewer)
Drainage Area: 2.15 mi² (USGS PA StreamStats)
River Mile Index: 0.000 (PA DEP eMapPA)
Low Flow Yield: 0.04 cfs/mi²
Discharge Flow: 0.00 mgd



NPDES Permit Fact Sheet

Fairfield STP

NPDES Permit No. PA0021776



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	2.13	square miles
PRECIP	Mean Annual Precipitation	42	inches
ROCKDEP	Depth to rock	5	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	2.28	miles per square mile

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 2]

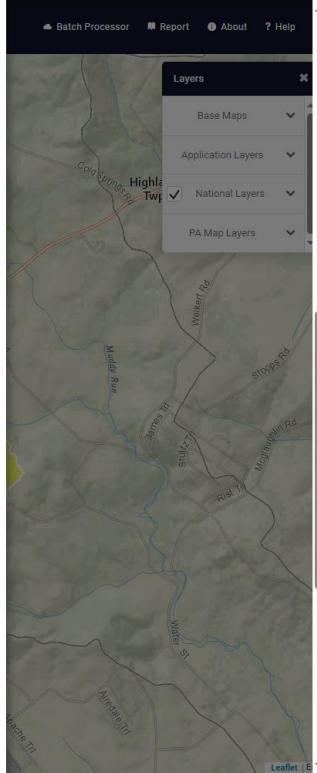
Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.13	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	42	inches	35	50.4
STRDEN	Stream Density	2.28	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	5	feet	3.32	5.65
CARBON	Percent Carbonate	0	percent	0	99

Low-Flow Statistics Disclaimers [Low Flow Region 2]

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 2]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.197	ft^3/s
30 Day 2 Year Low Flow	0.267	ft^3/s
7 Day 10 Year Low Flow	0.092	ft^3/s
30 Day 10 Year Low Flow	0.121	ft^3/s
90 Day 10 Year Low Flow	0.187	ft^3/s

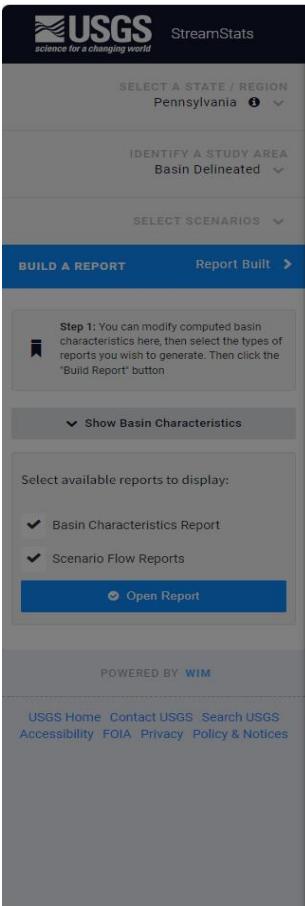


Batch Processor Report About ? Help

Layers

- Base Maps
- Application Layers
- National Layers
- PA Map Layers

Highline Twp



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	2.15	square miles
PRECIP	Mean Annual Precipitation	42	inches
ROCKDEP	Depth to rock	5	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	2.36	miles per square mile

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 2]

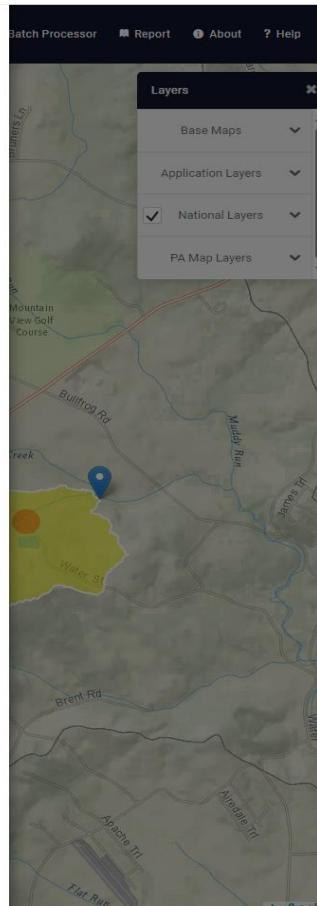
Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.15	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	42	inches	35	50.4
STRDEN	Stream Density	2.36	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	5	feet	3.32	5.65
CARBON	Percent Carbonate	0	percent	0	99

Low-Flow Statistics Disclaimers [Low Flow Region 2]

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 2]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.193	ft^3/s
30 Day 2 Year Low Flow	0.262	ft^3/s
7 Day 10 Year Low Flow	0.0898	ft^3/s
30 Day 10 Year Low Flow	0.118	ft^3/s
90 Day 10 Year Low Flow	0.183	ft^3/s



Batch Processor Report About ? Help

Layers

- Base Maps
- Application Layers
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- PA Map Layers

Mountain View Golf Course

NPDES Permit Fact Sheet
Fairfield STP

NPDES Permit No. PA0021776

Analysis Results WQM 7.0

Hydrodynamics NH3-N Allocations D.O. Allocations D.O. Simulation Effluent Limitations

RMI	Discharge Name	Permit Number Disc Flow	
		PA0021776	(mgd)
0.38	Fairfield STP	0.3000	

Parameter	Effluent Limit	Effluent Limit	Effluent Limit
	30 Day Average	Maximum	Minimum
CBOD5	25		
NH3-N	1.5	3	
Dissolved Oxygen			5

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rptEffLimits

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name	
		13 D	SPR12
RMI	Name	Permit Number	Disc. Flow (mgd)
0.380	Fairfield STP	PA0021776	0.300
		CBOD5	25
		NH3N	1.5
		Dissolved Oxygen	5

rpt_WLA

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name	
		13 D	SPR12
NH3-N Acute Allocations			
RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)
0.380 Fairfield STP		10.76	3
		Multiple Criterion (mg/L)	Multiple WLA (mg/L)
		10.76	3
		0	0
NH3-N Chronic Allocations			
RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)
0.380 Fairfield STP		1.69	1.5
		Multiple Criterion (mg/L)	Multiple WLA (mg/L)
		1.69	1.5
		0	0
Dissolved Oxygen Allocations			
RMI	Discharge Name	CBOD5 NH3N Dissolved Oxygen	Baseline Multiple (mg/L) Baseline Multiple (mg/L) Baseline Multiple (mg/L)
0.380 Fairfield STP		25 25 25	
		Multiple Criterion (mg/L) Multiple WLA (mg/L) Multiple WLA (mg/L)	
		1.5 1.5 5	
		Critical Reach Percent Reduction	
		0 0	

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NPDES Permit Fact Sheet
Fairfield STP

NPDES Permit No. PA0021776

rptDOSim

WQM 7.0 D.O. Simulation

SWP Basin	Stream Code	Stream Name
13D	58712	SPRING RUN
DEM	Total Discharge Flow (mgd)	Analytic Temperature (°C)
0.385	0.264	26.000
Reach Width (ft)	Reach Depth (ft)	Reach W/D Ratio
9.727	0.466	20.668
Reach CBOD5 (mg/L)	Reach K1 (1/day)	Reach NH3-N (mg/L)
21.000	1.777	0.20
Reach DO (mg/L)	Reach Kr (1/day)	Reach Kn (1/day)
5.540	21.850	0.000
Reach Travel Time (days)		Reach DO Goal (mg/L)
0.189		5

Subreach Results

Travel Time (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.019	20.59	1.23	5.99
0.038	20.02	1.22	6.31
0.057	19.47	1.21	6.54
0.076	18.94	1.19	6.71
0.095	18.42	1.17	6.86
0.113	17.91	1.15	6.95
0.132	17.42	1.14	7.04
0.151	16.94	1.12	7.11
0.170	16.48	1.11	7.18
0.189	16.02	1.10	7.24

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rptModelSpecs

WQM 7.0 Modeling Specifications

Parameters	Value	Notes
WLA Method	EMPR	Use Inputted Q1-10 and Q30-10 Flows
Q1-10/Q7-10 Ratio	0.64	Use Inputted W/D Ratio
Q30-10/Q7-10 Ratio	1.36	Use Inputted Reach Travel Times
D.O. Saturation	90.0%	Temperature Adjust %
D.O. Goal	5	Use Balanced Technology

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rptHydro

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name											
13D	58712	SPRING RUN											
RM	Stream Flow (cfs)	PWS Width (ft)	Net Stream Flow (cfs)	Reach Slope (ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (ft/s)	Reach Travel Time (days)	Analytic Temp (°C)	Analytic pH		
Q7-10 Flow	0.09	0.00	0.09	NA	1.00	0.299	.466	9.73	20.87	0.12	20.00	7.00	
Q1-10 Flow	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Q30-10 Flow	0.13	0.00	0.13	NA	1.00	0.299	NA	NA	NA	0.13	0.183	20.00	7.00

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rptGeneral

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	Rise	Elevation	Drainage Area (sq mi)	Slope	PWS Withdrawal (mgd)	Apply FC
13D	58712	SPRING RUN	0.330	58.20	2.15	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow (cfs)	Stream Flow (cfs)	Rdb Trv Time (days)	Rch Velocity (ft/s)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Temp (°C)	Temp (°F)	Stream pH
Q7-10	0.040	0.00	0.06	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00
Q1-10	0.00	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00
Q30-10	0.00	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00

Discharge Data

Name	Permit Number	Permit Max Disc Flow (mgd)	Design Disc Flow (mgd)	Design Reserve Factor	Disc Temp (°C)	Disc pH
Fairfield STP	PA0021776	0.30000	0.30000	0.30000	0.000	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trb Conc (mg/L)	Stream Conc (mg/L)	Date Coef (1/day)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	5.00	0.24	0.00	0.00
NH3-N	1.50	0.00	0.00	0.70

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NPDES Permit Fact Sheet
Fairfield STP

NPDES Permit No. PA0021776

rptGeneral

Input Data WQ M 7.0

SW P Basin	Stream Code	Stream Name	RMS	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
13D	58712 SPRING RUN		0.00	57.00	2.15	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav. Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Stream pH	Stream Temp (°C)
Q1-10	0.010	0.00	0.09	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00
Q1-10			0.00	0.000	0.000						
Q30-10			0.00	0.000	0.000						

Discharge Data

Name	Permit Number	Existing Dis. Flow (mgd)	Permitted Dis. Flow (mgd)	Design Dis. Flow (mgd)	Reserve Factor	Disc. Temp (°C)	Disc. pH
Fairfield Stream	PA0021776	0.0000	0.0000	0.0000	0.000	20.00	7.00

Parameter Data

Parameter Name	Disc. Conc. (mg/L)	Trib. Conc. (mg/L)	Stream Conc. (mg/L)	Rate Coef (1/day)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	5.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

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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" (386-0400-001), 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	Daily 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	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
UV Intensity (mW/cm ²)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Recorded
CBOD ₅	63	100	XXX	25.0	40.0	50	1/week	24-Hr Composite
BOD ₅ Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TSS	75	113	XXX	30.0	45.0	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	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Ammonia Nov 1 - Apr 30	11	XXX	XXX	4.5	XXX	9	1/week	24-Hr Composite
Ammonia May 1 - Oct 31	3.8	XXX	XXX	1.5	XXX	3	1/week	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite

Compliance Sampling Location: 

Other Comments: 

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" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter ⁽¹⁾	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Ammonia---N	Report	Report	XXX	Report	XXX	1/week	24-Hr Composite
Kjeldahl---N	Report	XXX	XXX	Report	XXX	1/week	24-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	1/week	24-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	1/week	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	1/week	24-Hr Composite
Net Total Nitrogen	Report	7,306	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	Report	974	XXX	XXX	XXX	1/month	Calculation

Compliance Sampling Location: 

Other Comments: 

Tools and References Used to Develop Permit	
<input checked="" type="checkbox"/>	WQM for Windows Model (see Attachment [REDACTED])
<input type="checkbox"/>	Toxics Management Spreadsheet (see Attachment [REDACTED])
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment [REDACTED])
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment [REDACTED])
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input checked="" type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input checked="" type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input checked="" type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input checked="" type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
<input type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input checked="" type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input checked="" type="checkbox"/>	SOP: BCW-PMT-033
<input type="checkbox"/>	Other: [REDACTED]