

Application Type Renewal  
Facility Type Municipal  
Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0020338  
APS ID 1052484  
Authorization ID 1377649

**Applicant and Facility Information**

Applicant Name	<u>Kulpmont Marion Heights Borough Joint Municipal Authority Northumberland County</u>	Facility Name	<u>Kulpmont Marion Heights Joint Municipal Sewer System</u>
Applicant Address	<u>9590 State Route 61 Coal Township, PA 17866-4110</u>	Facility Address	<u>860 Spruce Street Kulpmont, PA 17834-1356</u>
Applicant Contact	<u>Bob Fanella, Chairman</u>	Facility Contact	<u>Bob Fanella, Chairman</u>
Applicant Phone	<u>(570) 644-0461</u>	Facility Phone	<u>(570) 644-0461</u>
Client ID	<u>36488</u>	Site ID	<u>458718</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Coal Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Northumberland</u>
Date Application Received	<u>December 1, 2021</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u>December 2, 2021</u>	If No, Reason	<u>Significant CB Discharge</u>
Purpose of Application	<u>Renewal of a NPDES Permit</u>		

**Summary of Review**

The subject facility is a Publicly Owned Treatment Plant (POTW) serving the Boroughs of Kulpmont and Marion Heights and a portion of Mount Carmel Township in Northumberland County.

A map of the discharge location is attached.

Sludge use and disposal description and location(s): the facility's sludge is disposed by landfill. Per the application 7.09 dry tons were disposed in the previous year.

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		<i>Keith C. Allison</i> Keith C. Allison / Project Manager	May 16, 2022
X		<i>Nicholas W. Hartranft</i> Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	May 16, 2022

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.5</u>
Latitude	<u>40° 47' 16.63"</u>	Longitude	<u>-76° 29' 57.13"</u>
Quad Name	<u>Mount Carmel, PA</u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Quaker Run (CWF)</u>	Stream Code	<u>18653</u>
NHD Com ID	<u>54962621</u>	RMI	<u>0.12</u>
Drainage Area	<u>1.36 m<sup>2</sup></u>	Yield (cfs/mi <sup>2</sup> )	<u>N/A</u>
Q <sub>7-10</sub> Flow (cfs)	<u>Undetermined</u>	Q <sub>7-10</sub> Basis	<u>N/A</u>
Elevation (ft)	<u>Undetermined</u>	Slope (ft/ft)	<u>Undetermined</u>
Watershed No.	<u>6-B</u>	Chapter 93 Class.	<u>CWF</u>
Existing Use	<u>N/A</u>	Existing Use Qualifier	<u>N/A</u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>None</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>METALS</u>		
Source(s) of Impairment	<u>ACID MINE DRAINAGE</u>		
TMDL Status	<u>Final</u>	Name	<u>Shamokin Creek Watershed</u>
Nearest Downstream Public Water Supply Intake	<u>Suez Water near Dauphin, PA</u>		
PWS Waters	<u>Susquehanna River</u>	Distance from Outfall (mi)	<u>Approx. 72</u>

Changes Since Last Permit Issuance: None

Other Comments: The receiving stream is locally known as Dark Run. The stream is fed by mine seeps from deep mine pools. The amount of flow varies, and it is difficult to determine a Q<sub>7-10</sub> for it. The stream apparently receives a significant amount of flow compared to its drainage area. Stream assessments as recent as February 2, 2017 have verified that it is not supportive of aquatic life.

The facility is not identified as a significant discharger for the Shamokin Creek TMDL and has not received a wasteload allocations in it. Annual monitoring for Iron, Aluminum and Manganese was previously included per EPA recommendation and this monitoring will remain at once per year.

Because the receiving stream is not meeting water quality criteria and aquatic communities are essentially excluded, water quality modeling will not be conducted of the discharge consistent with 25 PA Code §95.5 of the Department's regulations.

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Kulpmont-Marion Heights Joint Municipal Authority				
<b>WQM Permit No.</b>	<b>Issuance Date</b>	<b>Permit For:</b>		
4902407	A-2 – 2/20/14	Belt Filter Press, sludge pumps, polymer feed and screw conveyor		
	A-1 – 2/10/12	Influent pump station upgrade		
	Original – 3/3/03	Sewer extension and plant upgrade including rotary influent screen, plant lift station, two ICEAS basins, reed drying beds, and UV disinfection		
<b>Waste Type</b>	<b>Degree of Treatment</b>	<b>Process Type</b>	<b>Disinfection</b>	<b>Avg Annual Flow (MGD)</b>
Sewage	Secondary	Extended Aeration	Ultraviolet	0.5
<b>Hydraulic Capacity (MGD)</b>	<b>Organic Capacity (lbs/day)</b>	<b>Load Status</b>	<b>Biosolids Treatment</b>	<b>Biosolids Use/Disposal</b>
1.35	563	Not Overloaded	Combination	Landfill

Changes Since Last Permit Issuance: None

Other Comments: The plant currently consists of fine screen, influent pump station, two Intermittent Cycle Extended Aeration System (ICEAS) SBR units, Ultraviolet light disinfection, aerobic sludge digester, three reed beds, and belt filter press.

Compliance History

DMR Data for Outfall 001 (from April 1, 2021 To: March 31, 2022)

Parameter	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21	JUL-21	JUN-21	MAY-21	APR-21
Flow (MGD) Average Monthly	0.28646	7	0.230044	0.206449	0.2754	0.2401	0.4824	0.198	0.185	0.165	0.2313	0.234479
Flow (MGD) Daily Maximum	0.538608	4	0.378564	0.9112	1.2191	1.8746	3.322	0.591	0.470	0.301	0.9291	0.837863
pH (S.U.) Minimum	6.32	6.19	6.45	6.4	6.3	6.2	6.0	6.0	6.11	6.19	6.3	6.09
pH (S.U.) Maximum	6.78	6.67	7.02	7.94	7.03	7.01	6.58	6.4	7.79	6.63	6.6	6.78
CBOD5 (lbs/day) Average Monthly	11	6	5	< 3	< 4	< 8	< 8	3	3.7	3	< 5	4
CBOD5 (lbs/day) Weekly Average	14	0.1	7	< 6	5	22	< 11	4	5.5	3.7	11	5
CBOD5 (mg/L) Average Monthly	4.2	4	2.7	< 2.1	< 2.2	< 2.9	< 2.4	2.1	2.4	2.1	< 2.5	2.8
CBOD5 (mg/L) Weekly Average	5.3	4	3	< 2.2	2.4	4.8	3	2.2	3.2	2.2	2.9	3.1
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	506	6	464	399	471	402	337	370	563	189	299	195
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	718	9	591	502	675	500	645	471	1822	206	476	272
BOD5 (mg/L) Raw Sewage Influent Average Monthly	202	3	257	260	289	243	100	262	258	45	170	133
TSS (lbs/day) Average Monthly	14	6	< 7	< 7	< 7	< 11	< 13	6	6.2	< 5.5	< 8	< 6
TSS (lbs/day) Raw Sewage Influent Average Monthly	380	6	382	373	330	419	374	407	476	98	208	85
TSS (lbs/day) Raw Sewage Influent Daily Maximum	412	9	460	440	457	552	535	551	1439	149	424	132
TSS (lbs/day) Weekly Average	19	9	1	< 10	< 8	23	20	8	6.9	< 6.8	< 15	< 7
TSS (mg/L) Average Monthly	5	4	< 4	< 4	< 4	< 5	< 4	5	< 4	< 4	< 4	< 4

**NPDES Permit Fact Sheet**  
**Kulpmont Marion Heights Joint Municipal Sewer System**

**NPDES Permit No. PA0020338**

TSS (mg/L) Raw Sewage Influent Average Monthly	151	3	212	237	206	263	116	286	227	78	104	59
TSS (mg/L) Weekly Average	6	4	4	5	4	7	4	6	< 4	< 4	< 4	< 4
Fecal Coliform (No./100 ml) Geometric Mean	94	4	< 54	165	14	60	< 27	44	5	476	526	23
Fecal Coliform (No./100 ml) Instantaneous Maximum	> 2419.6	4	1299	> 2419.6	218.7	> 2420	2419	1203	1203	1119	1203	2419.6
UV Transmittance (%) Minimum	65	65	65	65	65	65	65	65	65	65	65	65
Nitrate-Nitrite (mg/L) Average Monthly	< 0.56	4	< 0.31	< 0.42	0.89	1.59	< 2.4	0.75	0.57	0.55	< 0.56	2.8
Nitrate-Nitrite (lbs) Total Monthly	< 56	6	< 16	< 19	49	2	< 6	33	22	0.76	< 78.8	181
Total Nitrogen (mg/L) Average Monthly	6.76	4	11.05	13.73	3.69	4.4	< 3.7	1.84	2.27	2.6	< 2.49	3.9
Total Nitrogen (lbs) Effluent Net Total Monthly	< 514	6	< 705	< 642	< 187	284	< 288	81	88	102	< 250	< 249
Total Nitrogen (lbs) Total Monthly	550	6	705	658	183	284	< 288	81	88	3.58	< 250	249
Total Nitrogen (lbs) Effluent Net Total Annual							< 3938					
Total Nitrogen (lbs) Total Annual							< 3938					
Ammonia (mg/L) Average Monthly	4.9	4	10.5	12	1.94	< 1.74	< 0.24	0.18	0.14	0.95	< 0.37	< 0.11
Ammonia (mg/L) Weekly Average	6.6	4	15.4	17.2	5.4	5.2	< 0.31	0.42	0.26	3.0	1	0.12
Ammonia (lbs) Total Monthly	394	6	673	580	90	< 152	< 19	8	5.0	1	< 18	< 7
Ammonia (lbs) Total Annual							< 158					
TKN (mg/L) Average Monthly	6.2	4	10.7	13.3	< 2.9	2.8	< 1.3	1.1	1.6	2.0	< 1.94	< 1.1
TKN (lbs) Total Monthly	495	6	689	639	< 139	212	< 102	47	60	3.0	< 171.4	< 69
Total Phosphorus (mg/L) Average Monthly	0.155	4	< 0.22	0.45	0.40	1	1.1	1.64	0.73	0.58	0.36	1.11

**NPDES Permit Fact Sheet**  
**Kulpmont Marion Heights Joint Municipal Sewer System**

**NPDES Permit No. PA0020338**

Total Phosphorus (mg/L) Weekly Average	0.2	4	0.4	0.74	0.52	1.45	1.6	2	1.3	1.17	0.5	2.1
Total Phosphorus (lbs) Effluent Net Total Monthly	12	6	< 14	16	23	51	84	75	27	32	31	50
Total Phosphorus (lbs) Total Monthly	13	6	< 14	21	23	51	84	75	27	32	31	50
Total Phosphorus (lbs) Effluent Net Total Annual												
Total Phosphorus (lbs) Total Annual							< 831					
Total Aluminum (mg/L) Daily Maximum				0.0575								
Total Iron (mg/L) Daily Maximum				< 0.05								
Total Manganese (mg/L) Daily Maximum				0.0575								

**Compliance History, Cont'd**

**Effluent Violations for Outfall 001, from: April 1, 2021 To: March 31, 2022**

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	05/31/21	Min	0.1	S.U.	6.0	S.U.
Fecal Coliform	05/31/21	Geo Mean	526	No./100 ml	200	No./100 ml
Fecal Coliform	05/31/21	Geo Mean	526	No./100 ml	200	No./100 ml
Fecal Coliform	06/30/21	Geo Mean	476	No./100 ml	200	No./100 ml
Fecal Coliform	08/31/21	IMAX	1203	No./100 ml	1000	No./100 ml
Fecal Coliform	03/31/22	IMAX	> 2419.6	No./100 ml	10000	No./100 ml
Fecal Coliform	10/31/21	IMAX	> 2420	No./100 ml	10000	No./100 ml
Fecal Coliform	12/31/21	IMAX	> 2419.6	No./100 ml	10000	No./100 ml

Fecal Coliform	09/30/21	IMAX	2419	No./100 ml	1000	No./100 ml
Fecal Coliform	06/30/21	IMAX	1119	No./100 ml	1000	No./100 ml
Fecal Coliform	05/31/21	IMAX	1203	No./100 ml	1000	No./100 ml
Fecal Coliform	05/31/21	IMAX	1203	No./100 ml	1000	No./100 ml
Fecal Coliform	07/31/21	IMAX	1203	No./100 ml	1000	No./100 ml

**Compliance History, Cont'd**

<b>Summary of Inspections:</b>	The facility has been inspected at least annually over the past permit term, most recently on February 22, 2022. This inspection identified effluent violations as noted above.
<b>Other Comments:</b>	A query in WMS found no open violations in eFACTS for the Kulpmont Marion Heights Joint Municipal Authority.

Existing Effluent Limitations and Monitoring Requirements

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 Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	104	166	XXX	25	40	50	1/week	8-Hr Composite
Biochemical Oxygen Demand (BOD5) Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Total Suspended Solids	125	187	XXX	30	45	60	1/week	8-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
Ultraviolet light transmittance (%)	XXX	XXX	Report	XXX	XXX	XXX	Continuous	Metered
Ammonia-Nitrogen	XXX	XXX	XXX	Report	Report	XXX	2/week	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	Report	XXX	2/week	8-Hr Composite
Aluminum, Total	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	8-Hr Composite
Iron, Total	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	8-Hr Composite
Manganese, Total	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	8-Hr Composite



Existing Effluent Limitations and Monitoring Requirements – Chesapeake Bay								
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Monthly	Annual	Monthly	Monthly Average	Maximum	Instant. Maximum		
Ammonia--N	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Kjeldahl--N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Net Total Nitrogen	Report	9132	XXX	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	Report	1218	XXX	XXX	XXX	XXX	1/month	Calculation

**Development of Effluent Limitations**

<b>Outfall No.</b>	001	<b>Design Flow (MGD)</b>	0.5
<b>Latitude</b>	40° 47' 16.50"	<b>Longitude</b>	-76° 29' 57.10"
<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)

Comments: The above limits are applicable and included in the existing NDPEs Permit.

**Water Quality-Based Limitations**

Because the receiving stream is currently incapable of supporting aquatic life no additional modeling will be performed for the discharge to the tributary to Quaker Run at this time consistent with 25 Pa. Code §95.5.

No further “Reasonable Potential Analysis” was conducted to determine additional toxic pollutants as candidates for limitations for this minor POTW with no major industrial users to a stream that is not supporting aquatic life.

**Chesapeake Bay/Nutrient Requirements**

A portion of the Chesapeake Bay and many of its tidal tributaries have been listed as impaired under Section 303(d) of the Water Pollution Control Act, 33 U.S.C. §1313(d). Total Nitrogen and Total Phosphorus cap loads have been established for significant dischargers in Pennsylvania in order to reduce the total nutrient load to the Bay and meet State of Maryland Water Quality Standards. The Kulpmont Marion Heights Municipal Authority facility is considered a Phase 3, Significant Chesapeake Bay discharger. Nutrient cap loadings have previously been established for this facility consistent with the Phase III Watershed Implementation Plan.

The discharge’s cap loadings as well as the Total Nitrogen and Total Phosphorus loadings for the past two cycle years are listed in the table below.

Nutrient	Total Nitrogen	Total Phosphorus
<b>Nutrient Cap Loads for PA0020338</b>	9,132	1,218
<b>10/1/19 – 9/30/20 Net Loadings</b>	< 3,434	1,080
<b>10/1/20 – 9/30/21 Net Loadings</b>	< 3,938	< 831

**Best Professional Judgment (BPJ) Limitations**

Comments: No additional BPJ limitations will be applied at this time.

**Anti-Backsliding**

No limitations have been made less stringent consistent with the anti-backsliding requirements of the Clean Water Act and 40 CFR 122.44(l).

**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 Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	104	166	XXX	25	40	50	1/week	8-Hr Composite
Biochemical Oxygen Demand (BOD5) Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Total Suspended Solids	125	187	XXX	30	45	60	1/week	8-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	Report Daily Max	XXX	1/quarter	Grab
Ultraviolet light transmittance (%)	XXX	XXX	Report	XXX	XXX	XXX	Continuous	Metered
Ammonia-Nitrogen	XXX	XXX	XXX	Report	Report	XXX	2/week	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	Report	XXX	2/week	8-Hr Composite
Aluminum, Total	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	8-Hr Composite

Outfall 001 , Continued (from 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		
Iron, Total	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	8-Hr Composite
Manganese, Total	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	8-Hr Composite

Compliance Sampling Location: Outfall 001

Other Comments: e. coli monitoring is now included consistent with current policy and changes to Chapter 93 of the Department's regulations.

**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, to comply with Pennsylvania's Chesapeake Bay Tributary Strategy.

**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
	Monthly	Annual	Monthly	Monthly Average	Maximum	Instant. Maximum		
Ammonia--N	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Kjeldahl--N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Net Total Nitrogen	XXX	9132	XXX	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	XXX	1218	XXX	XXX	XXX	XXX	1/month	Calculation

Compliance Sampling Location: Outfall 001

Other Comments: Monthly Net Total Nitrogen and Phosphorus monitoring have been removed consistent with current Chesapeake Bay monitoring requirements consistent with the Phase III WIP.

Tools and References Used to Develop Permit	
<input 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 checked="" type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input checked="" type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
<input checked="" type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 385-2000-011, 9/08.
<input 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, 391-2000-002, 4/97.
<input checked="" type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
<input checked="" type="checkbox"/>	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
<input type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 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, 391-2000-019, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 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, 391-2000-022, 3/1999.
<input type="checkbox"/>	Design Stream Flows, 391-2000-023, 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, 391-2000-024, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
<input type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input checked="" type="checkbox"/>	SOP: Establishing Effluent Limitations for Individual Sewage Permits, rev. 8/23/13
<input type="checkbox"/>	Other: [redacted]

Attachments:

- A. Discharge Location Map

