

Application Type Renewal
 Facility Type Non-Municipal
 Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0086045
 APS ID 341952
 Authorization ID 1207039

Applicant and Facility Information

Applicant Name	<u>Castle Hill Mobile Home Park</u>	Facility Name	<u>Castle Hill Mobile Home Park</u>
Applicant Address	<u>20 Erford Road Suite 215</u> <u>Lemoyne, PA 17043-1163</u>	Facility Address	<u>2581 Old Harrisburg Road</u> <u>Gettysburg, PA 17325</u>
Applicant Contact	<u>David Rimmel</u>	Facility Contact	<u>Kimberly Nicholson</u>
Applicant Phone	<u>(717) 791-1201</u>	Facility Phone	<u>(717) 635-2437</u>
Client ID	<u>148711</u>	Site ID	<u>258364</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Straban Township</u>
Connection Status	<u>No Limitation</u>	County	<u>Adams</u>
Date Application Received	<u>October 30, 2017</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>November 20, 2017</u>	If No, Reason	<u></u>
Purpose of Application	<u>NPDES permit renewal.</u>		

Summary of Review

Castle Hill Mobile Home Park has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its National Pollutant Discharge Elimination System (NPDES) permit. The permit was issued on February 7, 2013 and became effective on March 1, 2013. The permit authorized discharge of treated sewage from the existing wastewater treatment plant (WWTP) located in Straban Township, Adams County to Unnamed Tributary to Rock Creek. The existing permit expiration date was February 28, 2018, and the permit has been administratively extended since that time.

Changes from the previous permit: Unit of Fecal Coliform changed from CFU/100 ml to No./100 ml.

Based on the review outline in this fact sheet, it is recommended that the permit be drafted and published in the Pennsylvania Bulletin for public comments for 30 days.

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		Hilary H. Le / Environmental Engineering Specialist	July 22, 2019
		Daniel W. Martin, P.E. / Environmental Engineer Manager	
		Maria D. Bebenek, P.E. / Clean Water Program Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.012
Latitude	39° 53' 17.18"	Longitude	-77° 11' 25.94"
Quad Name	Biglerville	Quad Code	
Wastewater Description: Sewage Effluent			
Receiving Waters	Unnamed Tributary to Rock Creek (WWF)	Stream Code	59218
NHD Com ID	53319414	RMI	0.46 mile
Drainage Area	0.15 mi ²	Yield (cfs/mi ²)	See comments below
Q ₇₋₁₀ Flow (cfs)	See comments below	Q ₇₋₁₀ Basis	StreamStats
Elevation (ft)	540 ft	Slope (ft/ft)	
Watershed No.	13-D	Chapter 93 Class.	WWF
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	NA	Distance from Outfall (mi)	Approximate 48 miles

Changes Since Last Permit Issuance: none

Drainage Area

The discharge is to Unnamed Tributary 59218 to Rock Creek at RMI 0.46 mile. A drainage area upstream of the discharge is estimated to be 0.15 mi², according to USGS PA StreamStats available at <https://streamstats.usgs.gov/ss/>.

Streamflow

There are no nearby stream gages with low flow data that have extensive or recent periods of record. Since USGS PA StreamStats estimated the drainage area that is below the minimum value allowed by USGS's regression equations, the USGS gage station No. 59041 on Rock Creek watershed (at the PA/MD border) will be used to calculate the Q₇₋₁₀ at the point of discharge using a low flow yield method. The Q₇₋₁₀ here is 2.52 cfs and the drainage area is 63.6 mi² which results in a Q₇₋₁₀ low flow yield of 0.04 cfs/mi². This information is used to obtain a chronic or 30-day (Q₃₀₋₁₀), and an acute or 1-day (Q₁₋₁₀) exposure stream flow for the discharge point as follows (Guidance No. 391-2000-023):

$$\begin{aligned} \text{Low Flow Yield} &= Q_{7-10\text{gage}} / \text{Drainage Area}_{\text{gage}} = 2.52 \text{ cfs} / 63.6 \text{ mi}^2 = 0.04 \text{ cfs/mi}^2 \\ Q_{7-10\text{discharge}} &= 0.04 \text{ cfs/mi}^2 * \text{Drainage Area}_{\text{discharge}} = 0.04 \text{ cfs/mi}^2 * 0.15 \text{ mi}^2 = 0.006 \text{ cfs} \\ Q_{30-10} &= 1.36 * Q_{7-10\text{discharge}} = 1.36 * 0.006 \text{ cfs} = 0.008 \text{ cfs} \\ Q_{1-10} &= 0.64 * Q_{7-10\text{discharge}} = 0.64 * 0.006 \text{ cfs} = 0.0038 \text{ cfs} \end{aligned}$$

Potable Water Supply Intake

The nearest downstream public water supply intake is the City of Frederick, MD intake on the Monocacy River, approximately 48 miles from the point of discharge. Given the nature and dilution, the discharge is not expected to significantly impact the water supply.

Treatment Facility Summary				
Treatment Facility Name: Castle Hill Mobile Home Park				
WQM Permit No.	Issuance Date			
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	Chlorine With Dechlorination	0.0122
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0123		Not Overloaded	Aerobic Digestion	Other WWTP

Changes Since Last Permit Issuance: none

The WWTP train is as follows:

The treatment process is as follows: Bar Screen (1) – Equalization Tank (1) – Aeration Tanks (2) – Settling Tank (1) – Tablet Chlorinator / Chlorine Contact Tank (1) – Tablet De-chlorinator / De-chlorination Contact Tank (1) – Post Aeration Tank (1) – Discharge (Outfall to Unnamed Tributary to Rock Creek).

Calcium hypochlorite tablets are used for chlorination and sodium sulfite tablets are used for de-chlorination. Soda ash and alum are used to control pH. A sludge holding tank is used for solids storage.

Compliance History	
Summary of DMRs:	See Table Below.
Summary of Inspections:	<p>4/13/2016, Mr. Haines, DEP Water Quality Specialist, conducted a compliance evaluation inspection. The outfall area was checked and clear. The recommendations were to collect process control information regularly and document; and maintain a daily operations log. There were no identified violations during inspection.</p> <p>10/25/2017, Mr. Bowen, DEP Water Quality Specialist, conducted a compliance evaluation inspection. The NH₃-N effluent limit exceedance was reported on the April 2017 DMR. There were no identified violations during inspection.</p>
Other Comments:	There are currently no open violations associated with the permittee or the facility.

Compliance History

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

Parameter	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18
Flow (MGD) Average Monthly	0.00542	0.00518	0.00545	0.00567	0.0052	0.00493	0.00496	0.00510	0.00613	0.00534	0.00588	0.00473
Flow (MGD) Daily Maximum	0.0057	0.00573	0.0085	0.0077	0.00745	0.00745	0.00573	0.0085	0.00835	0.00593	0.0084	0.0055
pH (S.U.) Minimum	6.5	6.6	6.6	6.7	6.6	6.7	6.7	6.7	6.3	6.4	6.6	6.0
pH (S.U.) Maximum	7.4	7.3	7.4	7.3	7.3	7.3	7.5	7.6	7.9	7.9	7.9	7.3
DO (mg/L) Minimum	6.6	6.0	6.2	7.9	6.4	6.2	6.1	7.1	6.4	8.3	6.0	6.6
TRC (mg/L) Average Monthly	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
TRC (mg/L) Instantaneous Maximum	0.02	< 0.02	0.02	0.02	< 0.02	< 0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	< 0.02
CBOD ₅ (mg/L) Average Monthly	< 3	4	9	9	4	< 3	< 3	< 3	< 3	< 3	< 3	< 3
TSS (mg/L) Average Monthly	3	12	27	20	4	6	5	8	3	5	4	23
Fecal Coliform (CFU/100 ml) Geometric Mean	34	37	2	3	4	< 2	< 2	< 4	105	11	71	429
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	46	60	6	4	4	< 2	< 2	8	274	30	106	446
Ammonia (mg/L) Average Monthly	< 0.1	< 0.1	< 0.13	< 0.15	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.8

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>0.012</u>
Latitude <u>39° 53' 17.54"</u>	Longitude <u>-77° 11' 25.97"</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)

Water Quality-Based Limitations

Carbonaceous Biochemical Oxygen Demand (CBOD₅):

Only the minimum treatment requirements of secondary treatment will be necessary to protect water quality. The existing limits of 25 mg/L average monthly and 50 mg/L instantaneous maximum will remain in the renewal permit. Past DMRs and inspection reports show that the facility has been consistently achieving concentrations under these limits.

Ammonia (NH₃-N):

NH₃-N calculations were first 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 computer model of the stream:

- Discharge pH = 7.0 (Default)
- Discharge Temperature = 21°C (Lower than the Default 25°C)
- Stream pH = 7.0 (Default)
- Stream Temperature = 25°C (Default for WWF)
- Background NH₃-N = 0 (Default)

The model input data and results are attached. The printout of the WQM 7.0 output indicates that at a discharge of 0.012 MGD, limits (rounded according to the NPDES Technical Guidance 362-0400-001) of 2.0 mg/L NH₃-N as a monthly average and 4.0 mg/L NH₃-N instantaneous maximum are necessary to protect the aquatic life from toxicity effects. These limits are slightly more stringent than those currently in place. However, the facility's recent DMRs indicate that the proposed limits are already being met consistently.

Total Suspended Solids (TSS):

The existing limits of 30 mg/L average monthly and 60 mg/L instantaneous maximum will remain in the renewal permit based on the minimum level of effluent quality attainable by secondary treatment based on 25 Pa. Code § 92a.47. Past DMRs and inspection reports show that the facility has been consistently achieving concentrations under these limits.

Dissolved Oxygen (D.O.):

A minimum D.O. of 5.0 mg/L is required per 25 Pa. Code § 93.7. This is consistent with the previous permit and current Department criteria.

pH:
 The effluent discharge pH should remain above 6 and below 9 standard units according to 25 Pa. Code § 95.2(2).

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 (average monthly) and not greater than 1,000/100 ml (IMAX) and 25 Pa. Code § 92a.47(a)(5) requires a winter limit of 2,000/100 ml as a geometric mean (average monthly) and not greater than 10,000/100 ml (IMAX), respectively.

Total Residual Chlorine (TRC):

Based on the attached TRC Excel Spreadsheet calculator, which uses the equations and calculations from the Department's May 1, 2003 Implementation Guidance for Total Residual Chlorine (ID No. 391-2000-015), the facility's discharge must meet a monthly average limit of 0.05 mg/L and an instantaneous maximum limit of 0.16 mg/L. Based on the DMRs from the past year, the facility has been consistently achieving this limit. Therefore, this limit will remain in the renewal permit.

Chesapeake Bay Strategy:

This facility falls in Phase 5 of the Pennsylvania's Chesapeake Bay Tributary Strategy Point Source Implementation Plan. At this time, the Department is not requiring a total maximum annual phosphorus or nitrogen loading cap. The Supplement to Phase II Watershed Implementation Plan states the following:

"For Phase 5 sewage facilities with individual permits (average annual design flow on August 29, 2005 >0.002 MGD and < 0.2 MGD), DEP will issue individual permits with monitoring and reporting for TN and TP throughout the permit term at a frequency no less than annually, unless 1) the facility has already conducted at least two years of nutrient monitoring and 2) a summary of the monitoring results are included in the next permit's fact sheet. If, however, Phase 5 facilities choose to expand, the renewed or amended permits will contain Cap Loads based on the lesser of a) existing TN/TP concentrations at existing average annual flow or b) 7,306 lbs/yr TN and 974 lbs/yr TP."

Total Nitrogen (TN) and Total Phosphorus (TP) "Monitor & Report" requirements will not be necessary since the facility has already satisfied the data criteria of the Chesapeake Bay Strategy.

Total Phosphorus (TP):

eMAP PA lists the section of Rock Creek closest to this facility's discharge point as being impaired for nutrients (without a TMDL). As per the previous protection report, an aquatic biologist from the Department concluded from his studies that phosphorus is not currently a problem in this area.

Toxic

This is a minor sewage facility receiving domestic wastewater only and the current application does not require sampling of toxic pollutants (or heavy metals) for those facilities with design flows less than 0.1 MGD. Therefore, no reasonable potential analysis for toxic pollutants has been performed for this permit renewal.

Additional Consideration

Flow Monitoring

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

Monitoring Frequency and Sample Type

The facility currently is required to collect daily effluent grab samples for DO, TRC, and pH; bi-monthly effluent 24-hr composite samples of CBOD₅, TSS, and ammonia-nitrogen; bi-monthly effluent grab samples of fecal coliform. Based on the best professional judgement of the author, the existing monitoring frequencies are sufficient and necessary. Therefore, the renewal permit monitoring frequencies will remain the same as those specified in the existing permit.

Antidegradation (93.4)

The effluent limits for this discharge have been developed to ensure that existing in-stream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

303d Listed Streams

This discharge is not located on a 303d listed stream segment.

Class A Wild Trout Fisheries

No Class A Wild Trout Fisheries are impacted by this discharge.

Anti-Backsliding

Unless stated otherwise in this fact sheet, all permit requirements proposed in this fact sheet are at least as stringent as existing permit requirements in accordance with 40 CFR §122.44(l)(1).

TRC results

TRC EVALUATION					
Input appropriate values in A3:A9 and D3:D9					
3	0.006	= Q stream (cfs)	0.5	= CV Daily	
4	0.012	= Q discharge (MGD)	0.5	= CV Hourly	
5	30	= no. samples	1	= AFC_Partial Mix Factor	
6	0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor	
7	0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)	
8	0.05	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)	
9	0	= % Factor of Safety (FOS)		=Decay Coefficient (K)	
10	Source	Reference	AFC Calculations		Reference CFC Calculations
11	TRC	1.3.2.iii	WLA_afc = 0.122		1.3.2.iii WLA_cfc = 0.112
12	PENTOXSD TRG	5.1a	LTAMULT_afc = 0.373		5.1c LTAMULT_cfc = 0.581
13	PENTOXSD TRG	5.1b	LTA_afc = 0.045		5.1d LTA_cfc = 0.065
15	Source	Effluent Limit Calculations			
16	PENTOXSD TRG	5.1f	AML_MULT = 1.231		
17	PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.050		BAT/BPJ
18			INST MAX LIMIT (mg/l) = 0.164		
22	WLA_afc	$(.019/e^{-k \cdot AFC_tc}) + [(AFC_Yc \cdot Qs \cdot .019 / Qd \cdot e^{-k \cdot AFC_tc}) \dots$ $\dots + Xd + (AFC_Yc \cdot Qs \cdot Xs / Qd)] \cdot (1 - FOS / 100)$			
24	LTAMULT_afc	$EXP((0.5 \cdot LN(cvh^2 + 1)) - 2.326 \cdot LN(cvh^2 + 1)^{0.5})$			
25	LTA_afc	wla_afc * LTAMULT_afc			
27	WLA_cfc	$(.011/e^{-k \cdot CFC_tc}) + [(CFC_Yc \cdot Qs \cdot .011 / Qd \cdot e^{-k \cdot CFC_tc}) \dots$ $\dots + Xd + (CFC_Yc \cdot Qs \cdot Xs / Qd)] \cdot (1 - FOS / 100)$			
29	LTAMULT_cfc	$EXP((0.5 \cdot LN(cvd^2 / no_samples + 1)) - 2.326 \cdot LN(cvd^2 / no_samples + 1)^{0.5})$			
30	LTA_cfc	wla_cfc * LTAMULT_cfc			
32	AML_MULT	$EXP(2.326 \cdot LN((cvd^2 / no_samples + 1)^{0.5}) - 0.5 \cdot LN(cvd^2 / no_samples + 1))$			
33	AVG MON LIMIT	MIN(BAT_BPJ, MIN(LTA_afc, LTA_cfc) * AML_MULT)			
34	INST MAX LIMIT	1.5 * ((av_mon_limit / AML_MULT) / LTAMULT_afc)			

WQM 7.0 Data:

WQM 7.0 MODEL INPUT:

1. Outfall 001 on Trib 59218 to Rock Creek
 - a. Elevation: 540 ft
 - b. RMI: $(17.13 + 0.46 = 17.59)$ miles to Monocacy River located at PA & MD boundaries
 - c. Drainage Area: 0.15 mi^2
 - d. Low Flow Yield: $0.04 \text{ cfs}/\text{mi}^2$
 - e. Discharge Flow: 0.012 MGD
2. Just before 59041 to Rock Creek
 - a. Elevation: 516 ft
 - b. RMI: $(17.13 + 0.001 = 17.131)$ miles to Monocacy River located at PA & MD boundaries
 - c. Drainage Area: 0.18 mi^2
 - d. Low Flow Yield: $0.04 \text{ cfs}/\text{mi}^2$
 - e. Discharge Flow: 0.000 MGD
3. Just before 59195 on Rock Creek
 - a. Elevation: 490 ft
 - b. RMI: 15.36 miles to Monocacy River located at PA & MD boundaries
 - c. Drainage Area: 2.33 mi^2
 - d. Low Flow Yield: $0.04 \text{ cfs}/\text{mi}^2$
 - e. Discharge Flow: 0.000 MGD

Attachment:



WQM 7.0 data.pdf

Existing Effluent Limitations and Monitoring Requirements

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	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
TRC	XXX	XXX	XXX	0.05	XXX	0.16	1/day	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	24-Hr Composite
TSS	XXX	XXX	XXX	30	XXX	60	2/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	6.0	XXX	12.0	2/month	24-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	2.0	XXX	4.0	2/month	24-Hr Composite

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.05	XXX	0.16	1/day	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	24-Hr Composite
TSS	XXX	XXX	XXX	30	XXX	60	2/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	6.0	XXX	12.0	2/month	24-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	2.0	XXX	4.0	2/month	24-Hr Composite

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"/>	PENTOXSD for Windows Model (see Attachment [redacted])
<input checked="" type="checkbox"/>	TRC Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Toxics Screening Analysis Spreadsheet (see Attachment [redacted])
<input 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 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 type="checkbox"/>	SOP: [redacted]
<input type="checkbox"/>	Other: [redacted]