pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0082864**
Facility Type	**Non-Municipal**	APS ID	**762**
Major / Minor	**Minor**	Authorization ID	**1333801**

Applicant and Facility Information

Applicant Name	**Jesus Ministries, Inc.**	Facility Name	**Jesus Ministries Agape Farms**
Applicant Address	17512 Rapture Street	Facility Address	17512 Rapture Street
	Shirleysburg, PA 17260-9318		Shirleysburg, PA 17260-9318
Applicant Contact	Mark Vanselous	Facility Contact	Aaron Estep
Applicant Phone	(814) 447-5659	Facility Phone	(814) 644-9198
Client ID	44830	Site ID	252826
Ch 94 Load Status	Not Overloaded	Municipality	Cromwell Township
Connection Status		County	Huntingdon
Date Application Received	November 12, 2020	EPA Waived?	Yes
Date Application Accepted	November 19, 2020	If No, Reason	

Purpose of Application: NPDES Permit Renewal.

Summary of Review

Jesus Ministries, Inc. has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its National Pollutant Discharge Elimination System (NPDES) permit for Jesus Ministries Agape Farms STP. This permit renewal application was received on November 19, 2020. The permit was last reissued on June 20, 2016, authorizing discharge of treated sewage from the existing treatment plant located in Cromwell Township, Huntingdon County into Browns Gap Run. The permit expires on June 30, 2021.

The WWTP has a design flow and hydraulic design capacity of 0.03 MGD. The facility received 100% of Agape Farms. This campground holds annual spiritual retreats and gatherings throughout the summer months. The largest gathering is known as “Creation Festival” and it is held the last weekend of June from Wednesday to Sunday. Attendance is normally between 60,000 to 90,000 people with campers and day trippers. The STP is usually seeded from the Mount Union Plant or Three Springs, a few weeks before the Creation event and actual discharge starts from about mid-July. The STP is usually shut down during the rest of the year.

Sludge use and disposal description and location(s): N/A due to the sludge is hauled by Robinson’s Septic Service.

The WQM No. 317740 A-1 amendment was issued on 4/13/2005.

Changes from the previous permit: Unit of Fecal Coliform changed from CFU/100 ml to No./100 ml. The E. Coli monitoring & requirements was added to the proposed permit.

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

Approve	Deny	Signatures	Date
X		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	May 7, 2021
X		/s/ Daniel W. Martin, P.E. / Environmental Engineer Manager	June 1, 2021

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.03
Latitude	40º 16' 48.43"	Longitude	-77º 55' 10.64"
Quad Name	Butler Knob	Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Browns Gap Run (CWF & MF)	Stream Code	12785
NHD Com ID	66211151	RMI	0.44 mile
Drainage Area	2.92 mi.^{2}	Yield (cfs/mi^2)	0.03
Q_{7-10} Flow (cfs)	0.085	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	602	Slope (ft/ft)	
Watershed No.	12-C	Chapter 93 Class.	CWF & MF
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	Mifflintown Water System, Juniata County		
PWS Waters	Juniata River	Flow at Intake (cfs)	
PWS RMI	37 miles	Distance from Outfall (mi)	Approximate 47 miles

Changes Since Last Permit Issuance: none

Drainage Area
The discharge is to Browns Gap Run at RMI 0.44 miles. A drainage area upstream of the discharge is estimated to be 2.92 mi.^{2}, according to USGS PA StreamStats available at https://streamstats.usgs.gov/ss/.

Streamflow
According to StreamStats, the discharge point on Browns Gap Run has a Q_{7-10} of 0.085 cfs and a drainage area of 2.92 mi.^{2}, which results in a Q_{7-10} low flow yield of 0.03 cfs/mi.^{2}. This information is used to obtain a chronic or 30-day (Q_{30-10}), and an acute or 1-day (Q_{1-10}) exposure stream flow for the discharge point as follows (Guidance No. 391-2000-023):

Q_{7-10} = 0.085 cfs
Low Flow Yield = 0.085 cfs / 2.92 mi.^{2} ≈ 0.03 cfs/mi.^{2}
Q_{30-10} = 1.36 * 0.085 cfs ≈ 0.12 cfs
Q_{1-10} = 0.64 * 0.085 cfs ≈ 0.05 cfs

Browns Gap Run
25 Pa Code § 93.9n classifies Browns Gap Run as Cold Water & Migratory Fishes (CWF & MF) surface water. Based on the 2018 Integrated Report, Browns Gap Run, assessment unit IDs 20537 & 18742, is not impaired. A TMDL currently does not exist for this stream segment, therefore, no TMDL has been taken into consideration during this review.

Public Water Supply
The nearest downstream public water supply intake is the Mifflintown Municipal Authority on the Juniata River in Mifflin Borough, approximately 47 miles downstream of this discharge. Considering distance and dilution, the discharge is not expected to impact the water supply.

Treatment Facility Summary				
Treatment Facility Name: Jesus Ministries Agape Farm Campground				
WQM Permit No.	**Issuance Date**			
317740 A-1	4/13/2005			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Secondary	Extended Aeration	Hypochlorite	0.03
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.03		Not Overloaded	Anaerobic Digestion	Other WWTP

Changes Since Last Permit Issuance: none

The WWTP train is as follows:

Equalization Tank (1) ⇒ Aeration Tanks (2) ⇒ Clarifiers (2) ⇒ Chlorine Contact Tank (1) ⇒ Sludge Holding Tank (1) ⇒ Sludge Baggers (2) ⇒ Blowers (4) ⇒ Discharge (Outfall 001)

Chlorine is used for disinfection, dechlor tablets for dechlorination, and lime for pH adjustment as needed.

Other Comments: This Minor Sewage Treatment Facility (MISF-1) is located in Cromwell Township, Huntingdon County. The facility is known as Agape Farm Campground Sewage Treatment Plant, owned, and operated by Jesus Ministries, Inc. This facility operates typically from start up in April thru June then again in September thru October, to shut down. The average days operation last four years were 33 days 2017, 29 days 2018, 25 days 2019, and 5* days 2020 (*due to pandemic).

Compliance History	
Summary of DMRs:	The eDMRs reported from March 1, 2020 to February 28, 2021 is summarized in the Table below (Pages # 4, & 5).
Summary of Inspections:	6/27/2019: Mr. Clark, DEP WQS, conducted a compliance evaluation inspection. There were recommendations to conduct routine effluent and process control testing throughout the day and keep copies of sludge hauling on-site for review. Effluent was clear. The field test results were within permit limits. There were no identified violations during inspection. 6/29/2017: Mr. Clark, DEP WQS, conducted a compliance evaluation inspection. There was recommendation to keep copies of sludge hauling on-site for review. Effluent was clear. The field test results were within permit limits. There was an identified violation during inspection to overdue DMR report for September 2016 through April 2017. 6/30/2016: Mr. Clark, DEP WQS, conducted a compliance evaluation inspection. Effluent was clear. The field test results were within permit limits. There were no identified violations during inspection.
Other Comments:	There are no open violations associated to the facility or the permittee.

Other Comments:

Compliance History

DMR Data for Outfall 001 (from March 1, 2020 to February 28, 2021)

Parameter	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20
Flow (MGD) Average Monthly					0.001							
Flow (MGD) Daily Maximum					0.00139 85							
pH (S.U.) Minimum					7.1							
pH (S.U.) Maximum					8.0							
DO (mg/L) Minimum					9.5							
TRC (mg/L) Average Monthly					0.03							
TRC (mg/L) Instantaneous Maximum					0.07							
CBOD5 (mg/L) Average Monthly					3.0							
TSS (mg/L) Average Monthly					31.0							
Fecal Coliform (CFU/100 ml) Geometric Mean					17							
Fecal Coliform (CFU/100 ml) Instantaneous Maximum					30							
Nitrate-Nitrite (mg/L) Average Monthly					26							
Nitrate-Nitrite (lbs) Total Monthly					7							
Total Nitrogen (mg/L) Average Monthly					26							
Total Nitrogen (lbs) Total Monthly					0.88							
Total Nitrogen (lbs) Total Annual						53						
Ammonia (mg/L) Average Monthly					0.4							
Ammonia (lbs) Total Monthly					10							

Ammonia (lbs) Total Annual						< 0.1						
TKN (mg/L) Average Monthly					0.8							
TKN (lbs) Total Monthly					0.19							
Total Phosphorus (lbs/day) Average Monthly					0.425							
Total Phosphorus (mg/L) Average Monthly					5							
Total Phosphorus (lbs) Total Monthly					12							
Total Phosphorus (lbs) Total Annual						12						

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.03
Latitude 40º 16' 48.77" **Longitude** -77º 55' 10.79"
Wastewater Description: 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
$CBOD_5$	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 ($CBOD_5$)
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 proposed permit. The facility has consistently achieved $CBOD_5$ levels well below these limits

Ammonia (NH_3-N)
NH_3-N 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 attached printout of the WQM 7.0 data indicates that at a discharge of 0.03 MGD, limits (rounded according to the NPDES Technical Guidance 362-0400-001) of 25 mg/L NH_3-N as a monthly average and 50 mg/L NH_3-N instantaneous maximum are necessary to protect the aquatic life from toxicity effects.

The following data is necessary to determine the in-stream NH_3-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	=	20ºC	(Default)
*	Background NH_3-N	=	0	(Default)

WQM 7.0 suggested NH_3-N limits of 6.84 mg/l monthly average and 13.68 mg/l instantaneous maximum (IMAX) during summer are protect water quality standards. However, the existing summer season permit limits of 4.0 mg/l monthly average and 8.0 mg/l IMAX are more stringent and will remain in the proposed permit according to federal anti-backsliding policy. The existing winter season permit limits of 12.0 mg/l monthly average and 24.0 mg/l IMAX will also remain in the proposed permit.

Total Suspended Solids (TSS)
The existing limits of 30 mg/L average monthly, and 60 mg/L instantaneous maximum 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. Past DMRs and inspection reports show that the facility has been consistently achieving 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 and an instantaneous maximum not greater than 1,000/100 ml and 25 Pa. Code § 92a.47.(a)(5) requires a winter limit of 2,000/100 ml as a geometric mean and an instantaneous maximum not greater than 10,000/100 ml.

E. Coli
The effluent discharge monthly average and IMAX of E. Coli 2/month monitoring and requirement will be added in the proposed permit by SOP No. BCW-PMT-003, version 1.9, revised March 22, 2021, and in 25 Pa Code § 92a.61.

Toxics
No toxic parameters of concern associated with this discharge.

Total Residual Chlorine
The attached computer printout (Attachment C) utilizes the equations and calculations as presented in the Department's 2003 Implementation Guidance for Residual Chlorine (TRC) (ID # 391-2000-015) for developing chlorine limitations. The attached printout indicates that a water quality limit of 0.277 mg/l as average monthly limit and 0.9 mg/l as instantaneous maximum would be needed to prevent toxicity concern. The existing permit limits of 0.18 mg/l monthly average and 0.6 mg/l IMAX was more stringent. Therefore, the existing limits will remain in effect in the proposed permit. The minimum monitoring frequency will remain the same as 1/day.

Biosolids Management
Sludge is digested on-site, via an aerobic sludge digester, and removed by a certified hauler.

Chesapeake Bay Strategy
According to DEP's Chesapeake Bay Phase II Watershed Implementation Plan (WIP) Wastewater Supplement, this facility is considered a phase 5 non-significant sewage discharger with design flow less than 0.2 MGD but greater than 0.002 MGD. In general, DEP will issue permits for all phase 5 facilities with monitoring and reporting for Total Nitrogen (TN) and Total Phosphorus (TP) throughout the permit term at a frequency no less than annually. Furthermore, DEP's SOP No. BPNPSM-PMT-033 states that in general, at a minimum, monitoring for TN and TP should be included in new and reissued permits for sewage discharges with design flows > 2,000 gpd. At this time, the Department is not requiring a total maximum annual nitrogen or phosphorus loading cap. Ammonia-Nitrogen, Nitrate-Nitrite as N, Total Kjeldahl Nitrogen, TN, and TP monitoring is already included in the existing permit and will remain in the proposed renewal.

The 2/month "Monitor & Report" requirements for Ammonia-Nitrogen, Nitrate-Nitrite as N, and Total Kjeldahl Nitrogen; and 1/month calculation "Monitor & Report" for TN will remain in the proposed permit. The yearly calculation "report" for Nitrate-Nitrite as N, Total Kjeldahl Nitrogen, TP & TN will remain in the proposed permit.

Stormwater
There is no known stormwater outfall associated with this facility.

Anti-Degradation (93.4)

The effluent limits for this discharge have been developed to ensure that the existing in-stream water used 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.

Class A Wild Trout Fisheries

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

303d Listed Streams:

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

Best Professional Judgment (BPJ) Limitations

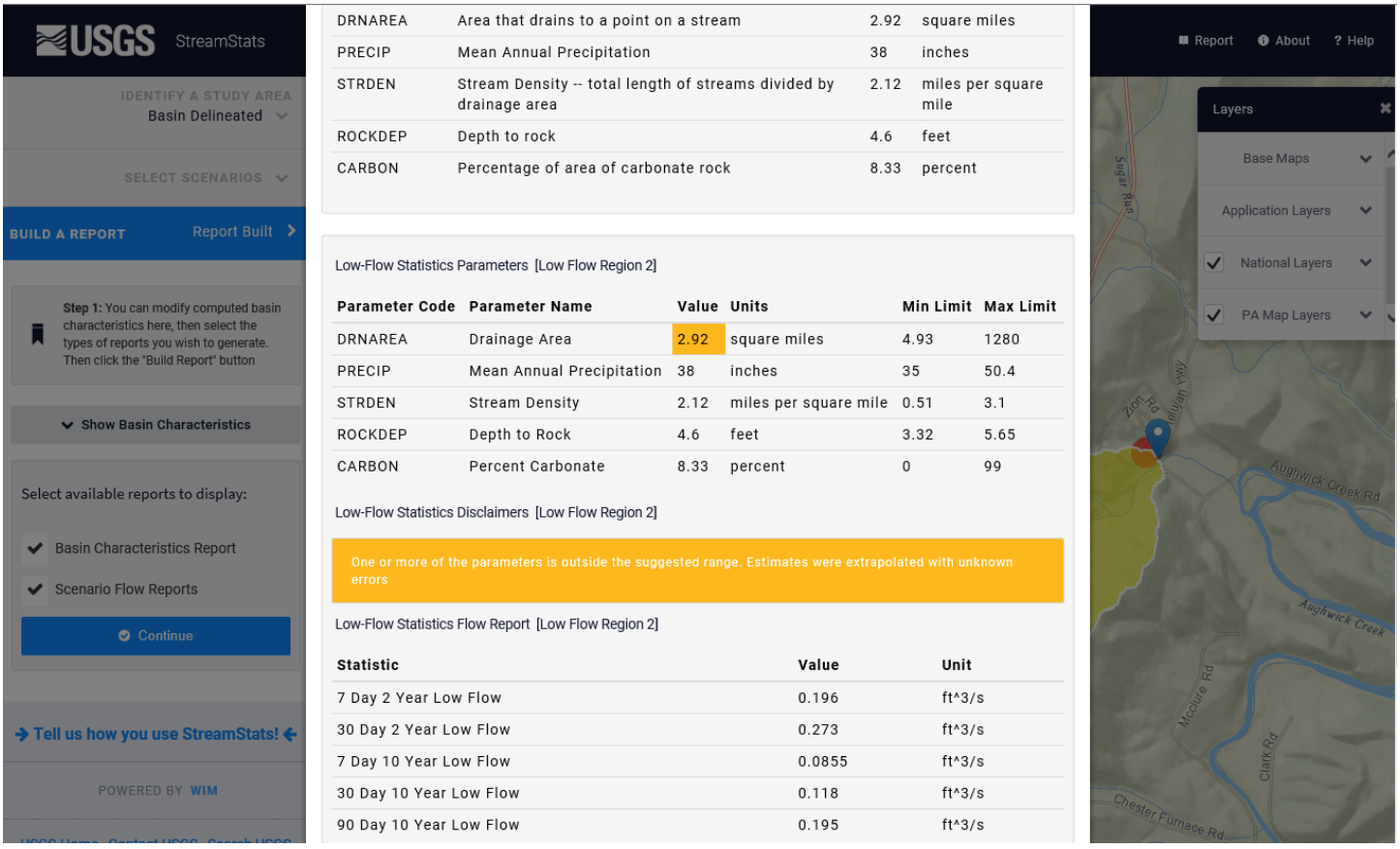
This facility's discharge frequency is not usual. They host an annual religious gathering named "Creation Festival" which usually takes place in mid or last week of June and ends at first or second week of July. This facility operates typically start up in April thru June then again in September thru October, then shut down, except in November or December when they empty the tanks. The minimum D.O. limit will remain 5.0 mg/L in the proposed permit. The existing permit has the monitoring frequencies for TSS, $CBOD_5$, and Fecal Coliform as 1/two days will remain in the proposed permit. The E. Coli 2/month monitoring and reporting requirements (SOP No. BCW-PMT-003, revised 3/24/2021) will add to the proposed permit. The Chesapeake Bay parameters (NH_3-N, NO_3-NO_2-N, TKN, TN, and TP) monitoring requirement are as specified in Table 6-3 of Permit Writers Manual (2/month) will remain in the proposed permit.

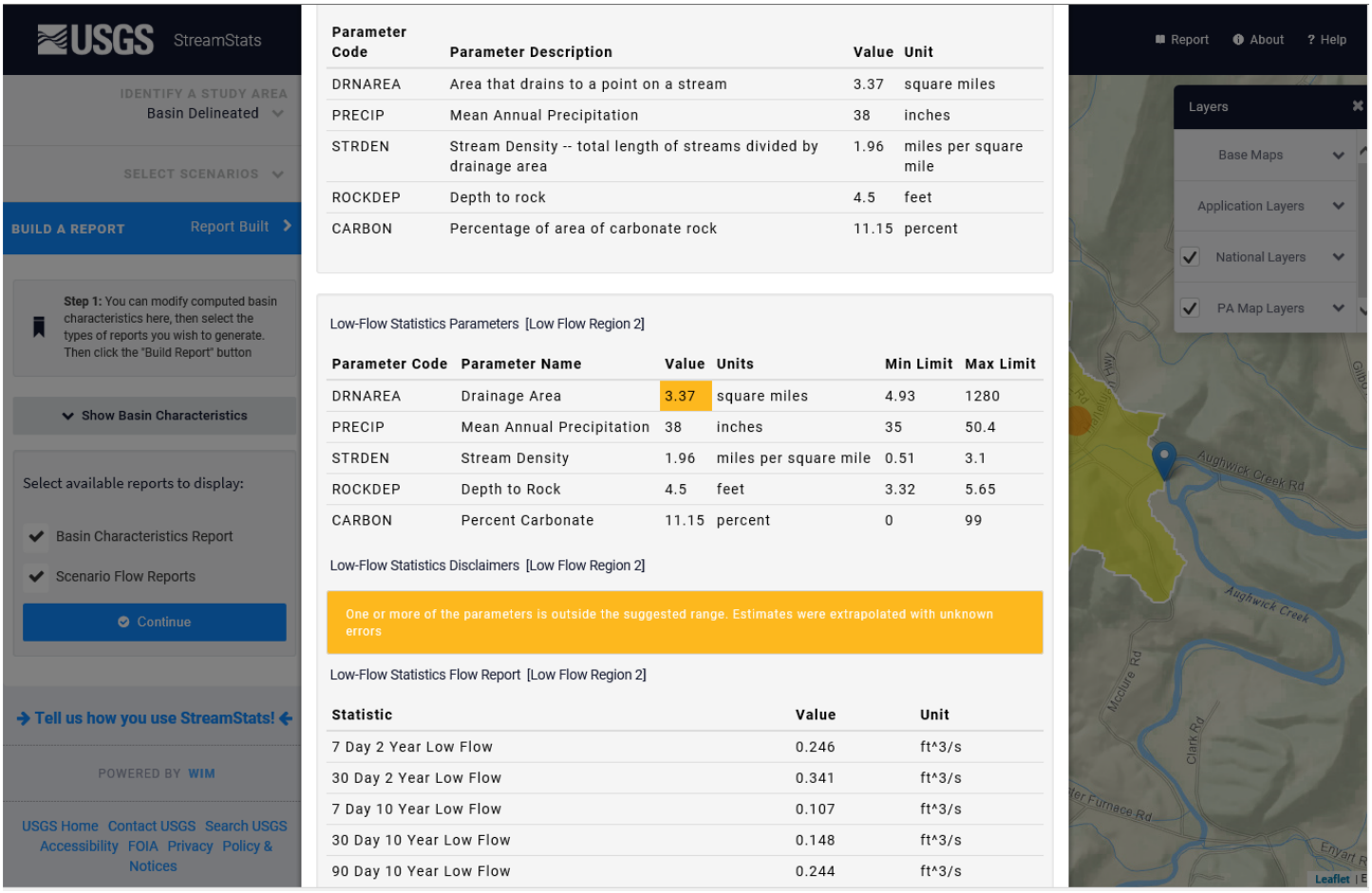
WQM 7.0:

The following three nodes were used in modeling:

Node 1: At outfall 001 on Browns Gap Run (12785)
- Elevation: 602 ft (USGS National Map Viewer)
- Drainage Area: 2.92 mi^2 (USGS PA StreamStats)
- River Mile Index: 0.44 (PA DEP eMapPA)
- Low Flow Yield: 0.03 cfs/mi^2
- Discharge Flow: 0.03 MGD

Node 2: At the confluence with Aughwick Creek
- Elevation: 577.11 ft (USGS National Map Viewer)
- Drainage Area: 3.37 mi^2 (USGS PA StreamStats)
- River Mile Index: 0.001 (PA DEP eMapPA)
- Low Flow Yield: 0.03 cfs/mi^2
- Discharge Flow: 0.00 MGD





USGS StreamStats

IDENTIFY A STUDY AREA
Basin Delineated

SELECT SCENARIOS

BUILD A REPORT — Report Built

Step 1: You can modify computed basin characteristics here, then select the types of reports you wish to generate. Then click the "Build Report" button

Show Basin Characteristics

Select available reports to display:

- Basin Characteristics Report
- Scenario Flow Reports

Continue

Tell us how you use StreamStats!

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Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	3.37	square miles
PRECIP	Mean Annual Precipitation	38	inches
STRDEN	Stream Density -- total length of streams divided by drainage area	1.96	miles per square mile
ROCKDEP	Depth to rock	4.5	feet
CARBON	Percentage of area of carbonate rock	11.15	percent

Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	3.37	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	38	inches	35	50.4
STRDEN	Stream Density	1.96	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4.5	feet	3.32	5.65
CARBON	Percent Carbonate	11.15	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]

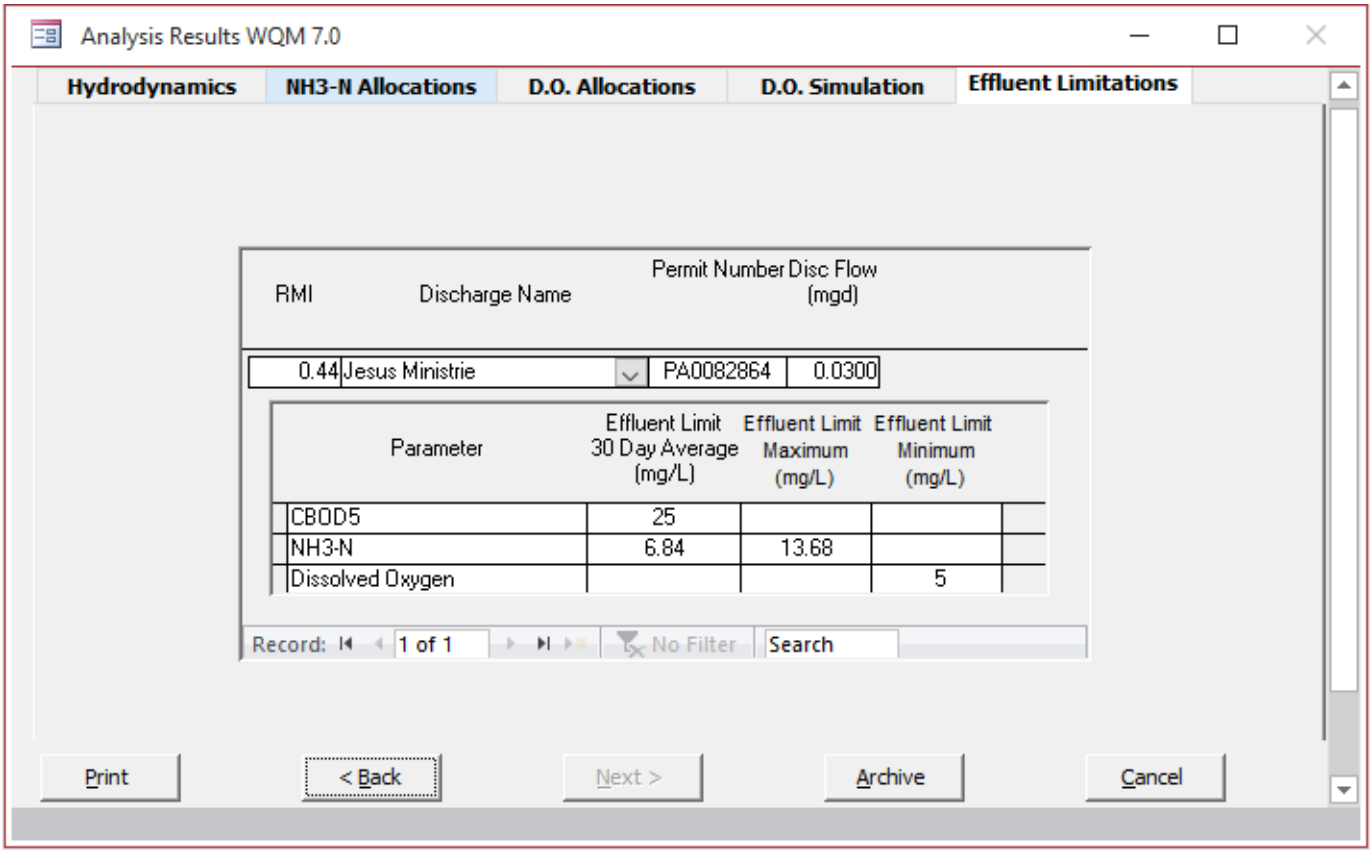
Statistic	Value	Unit
7 Day 2 Year Low Flow	0.246	ft^3/s
30 Day 2 Year Low Flow	0.341	ft^3/s
7 Day 10 Year Low Flow	0.107	ft^3/s
30 Day 10 Year Low Flow	0.148	ft^3/s
90 Day 10 Year Low Flow	0.244	ft^3/s

Report About Help

Layers

Base Maps
Application Layers
National Layers
PA Map Layers

Aughwick Creek Rd
Aughwick Creek
Mcclure Rd
Clark Rd
Furnace Rd
Leaflet



Analysis Results WQM 7.0

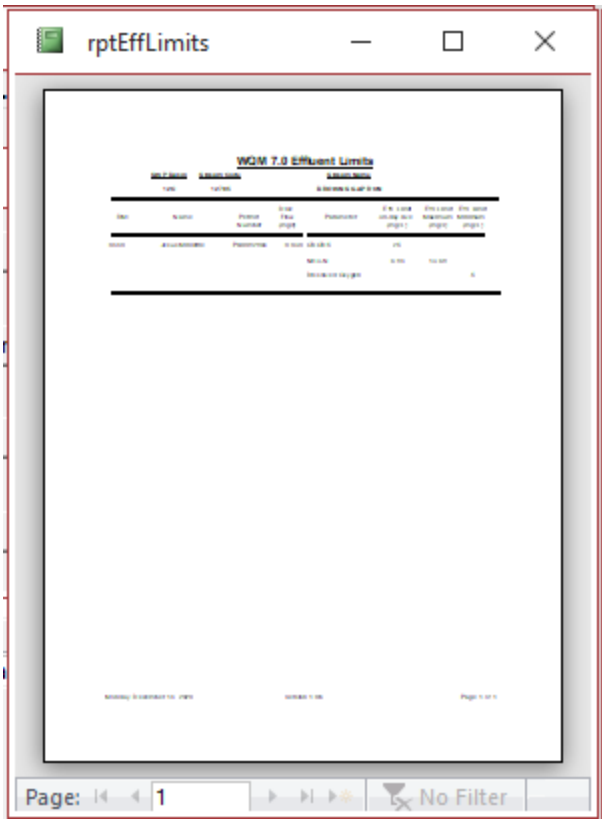
Hydrodynamics | NH3-N Allocations | D.O. Allocations | D.O. Simulation | Effluent Limitations

RMI	Discharge Name	Permit Number	Disc Flow (mgd)
0.44	Jesus Ministrie	PA0082864	0.0300

Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)
CBOD5	25		
NH3-N	6.84	13.68	
Dissolved Oxygen			5

Record: 1 of 1 | No Filter | Search

Print | < Back | Next > | Archive | Cancel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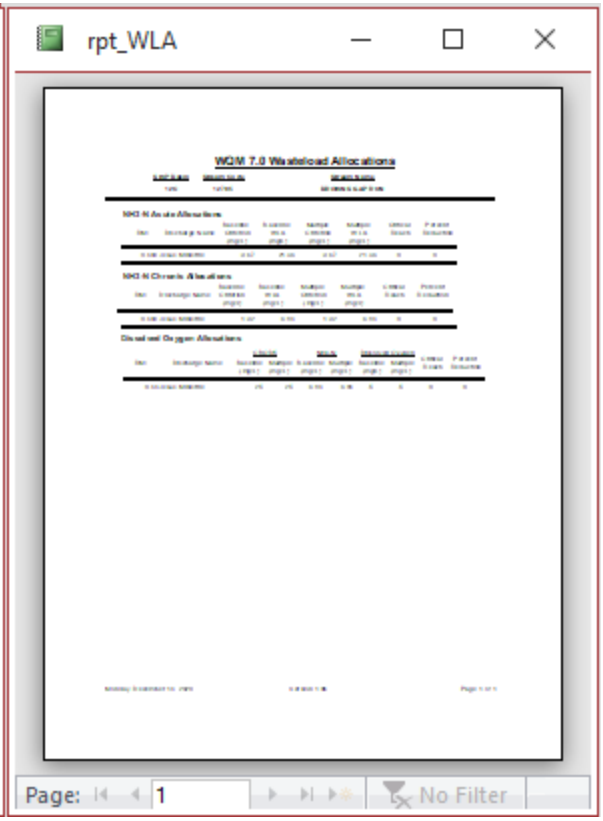
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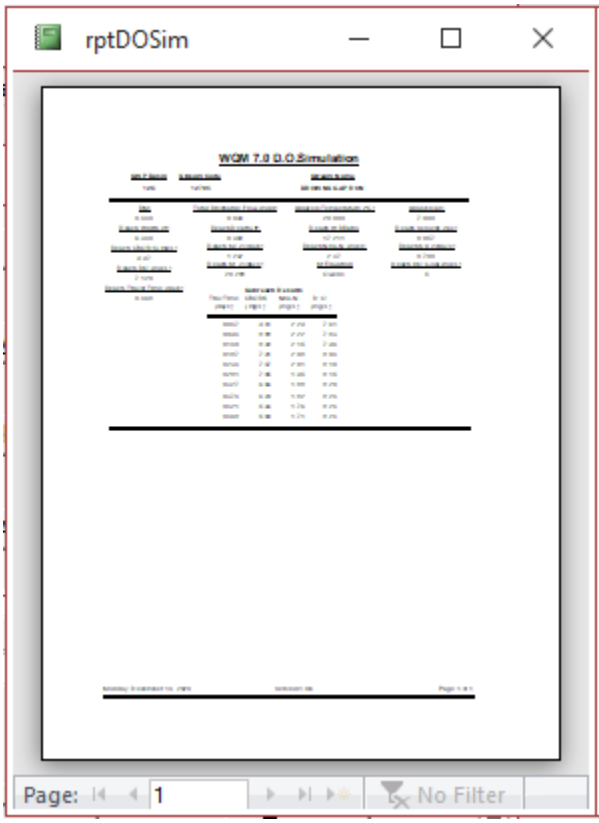
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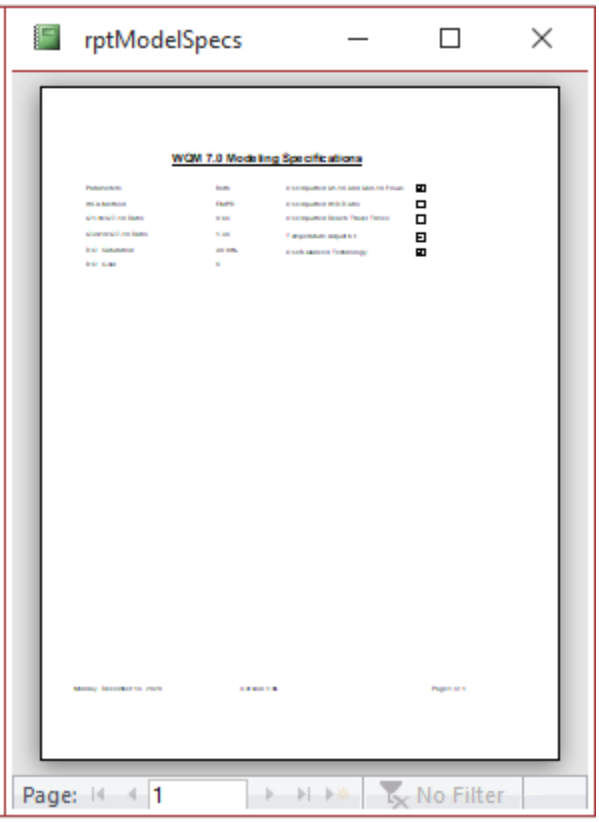
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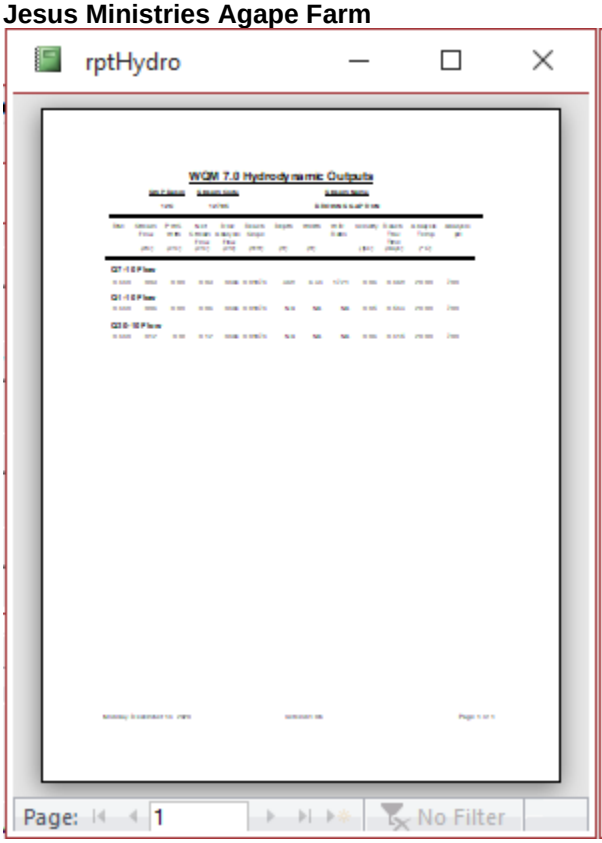
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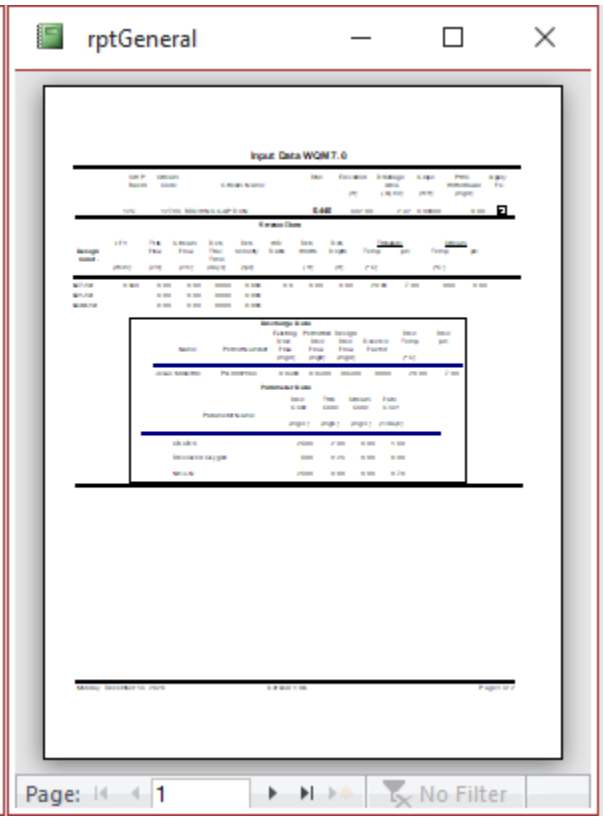
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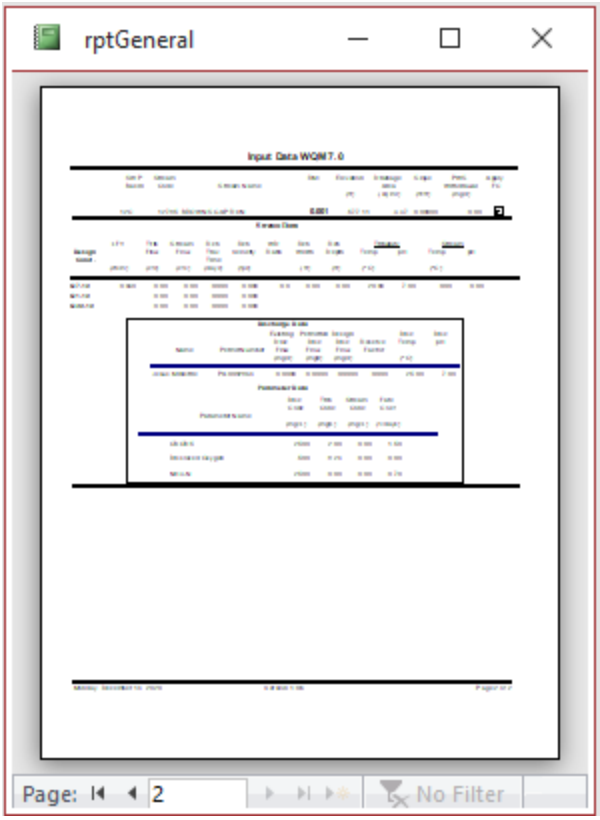
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TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.085	= Q stream (cfs)	0.5	= CV Daily
0.03	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.603	1.3.2.iii	WLA cfc = 0.581
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.225	5.1d	LTA_cfc = 0.338

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.277	AFC
		INST MAX LIMIT (mg/l) = 0.905	

WLA afc	**(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))...** **...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)**
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
WLA_cfc	**(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))...** **...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)**
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)
LTA_cfc	wla_cfc*LTAMULT_cfc
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)
INST MAX LIMIT	**1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)**

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
	Total Monthly	Daily Maximum	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report Avg Mo	Report	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/day	Grab
Dissolved Oxygen	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.18	XXX	0.6	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	25.0	XXX	50.0	1/two days	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60.0	1/two days	8-Hr Composite
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/two days	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	1/two days	Grab
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	4.0	XXX	8.0	2/month	8-Hr Composite
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	12.0	XXX	24.0	2/month	8-Hr Composite

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
	Monthly	Annual	Minimum	Average Monthly	Maximum	Instant. Maximum		
Ammonia--N	Report	Report	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Kjeldahl--N	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	XXX	2/month	8-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	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.18	XXX	0.6	1/day	Grab
$CBOD_5$	XXX	XXX	XXX	25.0	XXX	50.0	1/two days (3)	8-Hr Composite
TSS	XXX	XXX	XXX	30.0	XXX	60.0	1/two days (3)	8-Hr Composite
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/two days (3)	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	1/two days (3)	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	Report	XXX	Report	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	4.0	XXX	8.0	2/month	8-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	12.0	XXX	24.0	2/month	8-Hr Composite

Compliance Sampling Location:

Other Comments:

Proposed 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
	Monthly	Annual	Minimum	Average Monthly	Maximum	Instant. Maximum		
Ammonia--N	Report	Report	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Kjeldahl--N	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	XXX	2/month	8-Hr Composite

Compliance Sampling Location:

Other Comments:

Tools and References Used to Develop Permit	
☒	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☒	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☒	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☐	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.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☒	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☒	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☒	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	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.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	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.
☐	Design Stream Flows, 391-2000-023, 9/98.
☐	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.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☒	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other: