pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0088684**
Wastewater Type	**Sewage**	APS ID	**991087**
Facility Type	**SFTF**	Authorization ID	**1422086**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**John S Lentz & Rachel L Lentz**	Facility Name	**Pleasant Hills Campground**
Applicant Address	12733 Pleasant Hills Drive, PO Box 86	Facility Address	12733 Pleasant Hills Drive
	Hesston, PA 16647-0086		Hesston, PA 16647-0086
Applicant Contact	John Lentz	Facility Contact	John Lentz
Applicant Phone	(814) 658-3986	Facility Phone	(814) 658-3986
Client ID	349185	Site ID	2960
SIC Code	7033	Municipality	Penn Township
SIC Description	Services - Trailer Parks And Campsites	County	Huntingdon
Date Application Received	November 28, 2022	WQM Required	N/A
Date Application Accepted	January 4, 2023	WQM App. No.	

Project Description: NPDES permit renewal.

Summary of Review

The PA Department of Environmental Protection (DEP or Department) has received an NPDES permit renewal application from Pleasant Hills Campground (permittee), located in Penn Township, Huntingdon County on November 28, 2022. This is a seasonal campground operated only during summer season (May-October).

The annual average design flow and Hydraulic Design Capacity is 2,000 GPD (0.002 MGD). The receiving stream is UNT to Hawns Run in watershed 11-D and classified as Warm Water Fishes -Migratory Fishes (WWF & MF). The existing permit was issued on June 29, 2018, PA0088684 A-1 amendment was issued on May 9, 2019 for ownership transfer and expires on June 30, 2023.

The WQM Part II No. 3101401 original was issued on 7/31/2001, 3101401 A-1 amendment was issued on 10/17/2006, and 3101401 T-1 ownership transferred was issued on 5/09/2019.

Sludge use and disposal description and location(s): N/A because sludge is hauled away, by Lake Septic.

Changes from the previous permit: The 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		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	March 31, 2023
X		Maria D. Bebenek for Daniel W. Martin, P.E. / Environmental Engineer Manager	April 13, 2023

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.002
Latitude	40º 24' 50.72"	Longitude	-78º 4' 55.18"
Quad Name	Huntingdon	Quad Code	1521
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Hawns Run (WWF)	Stream Code	13364
NHD Com ID	65839875	RMI	2.37 miles
Drainage Area	0.45 mi.^{2}	Yield (cfs/mi^2)	See comments below
Q_{7-10} Flow (cfs)	See comments below	Q_{7-10} Basis	See comments below
Elevation (ft)	922.5	Slope (ft/ft)	
Watershed No.	11-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	**None proposed**	Name	**N/A**
Nearest Downstream Public Water Supply Intake	Mifflintown Water System Juniata River		
PWS Waters	Juniata river	Flow at Intake (cfs)	
PWS RMI	37.37 miles	Distance from Outfall (mi)	Approximate 66.3 miles

Changes Since Last Permit Issuance: none

Drainage Area
The discharge is to Unnamed Tributary to Hawns Run at RMI 2.37 miles. A drainage area upstream of the discharge is estimated to be 0.45 mi.^{2}, according to USGS StreamStats available at https://streamstats.usgs.gov/ss/.

Stream Flow
Streamflow will be correlated with past stream flow records taken from the nearby USGS stream gauge 01563000 in Huntingdon, PA which is approximately 3.6 miles downstream of the discharge point. Q_{7-10}, and Q_{30-10} values at this gage are 56.6 cfs, and 73.7 cfs. The drainage area at gauge station was found to be 956 mi^2. These values were obtained from the latest USGS streamflow report. The drainage area at the Discharge Point (DP) was found to be 0.06 mi^2 from USGS StreamStats.

$$Q_{7-10} \text{ runoff rate} = 56.6 \text{ cfs} / 956 \text{ mi}^2 = 0.06 \text{ cfs/mi}^2$$
$$Q_{7-10} = 0.06 \text{ cfs/mi}^2 * 0.45 \text{ mi}^2 = 0.027 \text{ cfs}$$

PWS Intake:
The nearest downstream public water supply is Mifflintown Water Systems in Juniata County on Juniata River at RMI 37.37 miles. It is approximately 66.3 miles downstream of the discharge. Due to the distance, dilution, and effluent limits the discharge is not expected to impact the water supply.

Treatment Facility Summary

This Small Flow Treatment Facility (SFTF) is at Penn Township, Huntingdon County. This facility is owned and operated by Pleasant Hills Campground. This is a seasonal campground operated only during summer season (May-October). There are total of 140 camp sites of which 132 sites are active. 125 sites are seasonal meaning they are rented for the whole summer season but may be used few times during the season. There are 6 overnight sites available.

The facility has a contract operator and a consulting company providing technical support once a month and prior to plant start-up in April-May.

Per the most recent site inspection on August 18, 2021, the facility consists of the following treatment units:

1. One 1000-gallon grease trap
2. One 3,500-gallon septic tank
3. One 2,000-gallon dual compartment septic tank
4. One 1,000-gallon dosing tank with dual siphon pumps
5. Ten 1,250-gallons free access sand filters with a total surface area of 400 sft (10 unit * 40 sft/unit)
6. Aeration cascade
7. Norweco ITR 2000-S tablet chlorinator
8. 500-gallon chlorine contact tank
9. Tablet dechlorination
10. Outfall 001

Compliance History	
Summary of DMRs:	Please see Table on page 4
Summary of Inspections:	**9/28/2022:** Mr. Clark, DEP's WQS, conducted a following up inspection to check on the total residual chlorine (TRC) level of the discharge. There was no violation noted during inspection. The field test result for TRC was 0.01 mg/L. **8/18/2022:** Mr. Clark, DEP's WQS, conducted compliance evaluation inspection. The violation was noted during inspection. The TRC field test results was over the permit limit. The dechlorinated tablet feeder was filled with tablets. Recommendation: should check the tablet feeder and confirm that the correct tablets were put in place and that the tablets are making contact with the effluent flowing through the pipe. **8/18/2021:** Mr. Clark, DEP's WQS, conducted compliance evaluation inspection. There was no violation noted during inspection. Discharge flow was measured with a volumetric weir at the outfall. The tanks were last pumped in July 2021. The field test result for TRC was 0.01 mg/L. **6/23/2020:** Mr. Clark, DEP's WQS, conducted an administrative inspection. There was no violation noted during inspection. The campground was open seasonally. There had been no effluent violations since July 2018.
Other comments:	There are no open violations against the permittee or applicant.

Parameter	Month													
	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22
Flow (MGD)	0.000169	0.000311	0.00071	0.000877	0.000824	0.000584	0.000116	0.000115	0.000169	0.00028	0.000217	0.000254	0.000151	0.000114
TRC	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
BOD_5	< 7.0	< 3.0	< 3.0	< 3.0	< 3.0	3.0	< 3.0	< 3.0	< 3.0	< 3.0	14.0	< 3.0	< 5.0	< 3.0
TSS	7.0	4.0	< 2.0	3.0	2.0	2.0	4.0	4.0	3.0	< 2.0	14.0	< 2.0	2.0	5.0
Fecal Coliform	< 1.0	1.0	< 1.0	< 1.0	< 3.0	1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0	3.0	< 0.1

Development of Effluent Limitations

Outfall No.	001	Design Flow (MGD)	0.002
Latitude	40º 24' 50.72"	Longitude	-78º 4' 55.18"
Wastewater Description:	Sewage Effluent		

Water Quality-Based Limitations

DEP's Standard Operating Procedures (SOP) for the Clean Water Program SOP No. BPNPSM-PMT-003 version 1.8 revised on May 17, 2019, indicates that in determining effluent limitations for the reissuance of a permit for a Small Flow Treatment Facility (SFTF), water quality modeling via PentoxSD and/or WQM will not be conducted.

Additional Considerations

Flow monitoring:
Flow monitoring will be continued in this renewal in accordance with DEP's SOP BPNPSM-PMT-003 version 1.8 revised on May 17, 2019. The reporting frequency will be revised to twice a month and sample type is Measured (for SFTF). The facility had installed volumetric weir to measure the flow.

Biochemical Oxygen Demand (BOD_5):
DEP's Standard Operating Procedure (SOP) No. BPNPSM-PMT-003, version 1.8 revised May 17, 2019, suggests average monthly BOD_5 limit to be 10.0 mg/L and instantaneous maximum (IMAX) limit to be 20.0 mg/L for new or renewal permits. Existing BOD_5 limit is 25.0 mg/L as average monthly. However, the SOP also indicated that more stringent BOD_5 limits may not be applicable for existing SFTFs that were permitted prior to the publication of the Small Flow Treatment Facilities Manual (362-0300-002), which is December 2, 2006, when such facilities are not capable of meeting tertiary treatment limits. The treatment plant was first permitted in July 31, 2001. The minimum monitoring frequency will remain the same as 2/month.

Total Suspended Solids (TSS):
DEP's Standard Operating Procedure (SOP) No. BPNPSM-PMT-003, version 1.8 revised May 17, 2019, suggests average monthly TSS limit to be 10.0 mg/L and IMAX limit to be 20.0 mg/L. Existing limits are 30.0 mg/L as monthly average and 60.0 mg/L as IMAX. As discussed in BOD_5 section above, more stringent TSS limits may not be applicable for this facility. Minimum monitoring frequency will remain the same as 2/month.

Fecal Coliform:
Per SOP, a year-round average monthly limit for fecal coliform geometric mean to be 200/100 ml for all new or renewal. The existing permit has year-round limit. The minimum monitoring frequency is 1/month per SOP and will remain in the proposed permit.

E. Coli:
As recommended by DEP's SOP No. BCW-PMT-033, version 1.9 revised March 22, 2021, 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/year will be included in the permit to be consistent with the recommendation from this SOP.

Total Residual Chlorine:
The attached computer printout or TRC Spreadsheet utilizes the equation and calculations as presented in the Department's 2003 Implementation Guidance for Total Residual Chlorine (TRC) (ID#391-2000-015) for developing chlorine limitations, which indicates average monthly limit of 0.05 mg/L & IMAX limit of 1.6 mg/L. The minimum monitoring frequency will remain 2/month.

Ammonia-N:
Since no WQM model was utilized for SFTFs, not recommended in SOP, receiving stream is not impaired, there is no nearby downstream water supply wells, and nearby PWS intake is approximately 66 miles downstream of the discharge point, it is recommended that no Ammonia-N monitoring requirements need for this permit cycle.

Chesapeake Bay Tributary Strategy:
Facilities with design flow less than or equal to 2,000 GPD are exempted from monitoring Chesapeake Bay nutrients parameters.

Anti-Degradation Requirement

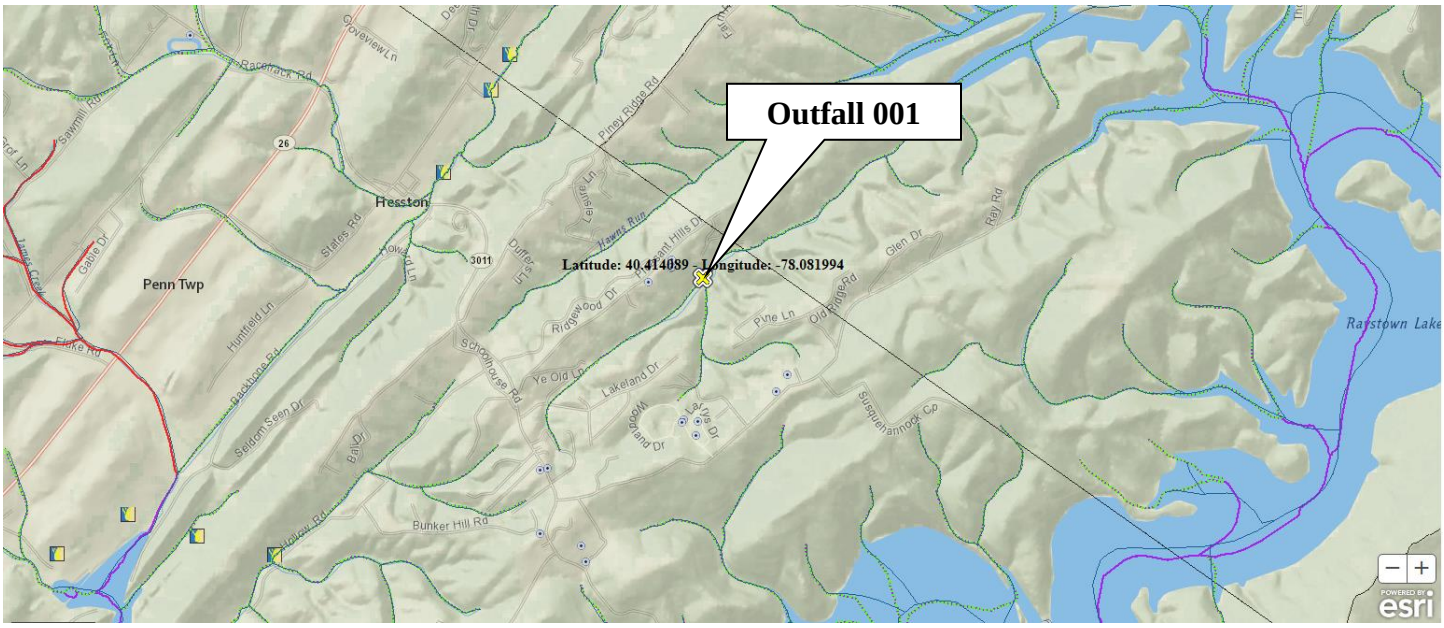
Chapter 93.4a(b) of the Department's rules and regulations require that "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." No High Quality (HQ) stream will be impacted by this discharge. No Exceptional Value (EV) water will be impacted by this discharge.

Class A Wild Trout Streams:

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

303d Listed Streams:

The discharge is in a stream segment of UNT to Hawns Run which is attaining its designated use of Aquatic Life and is not listed in 303d list.

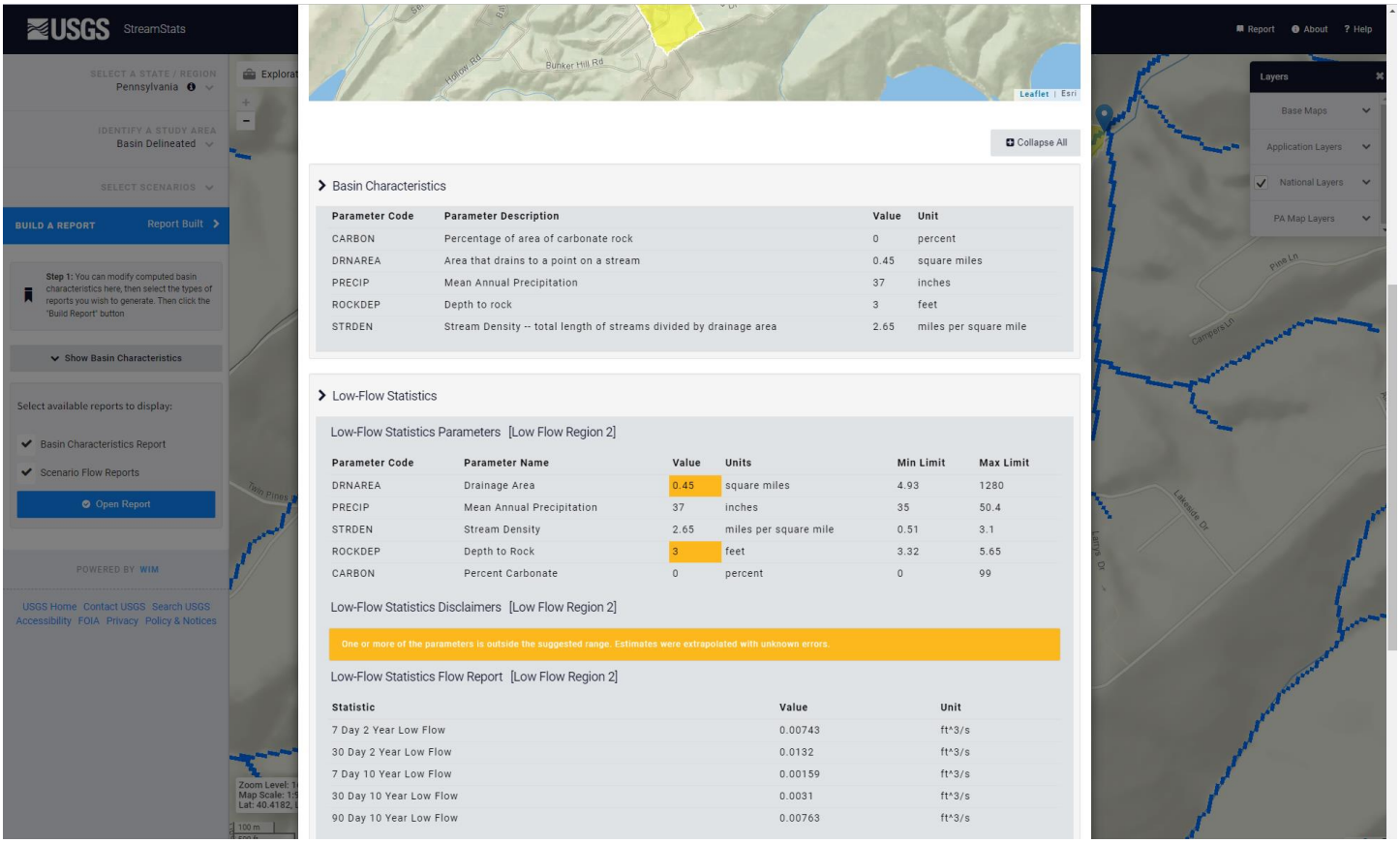


TRC EVALUATION			
Input appropriate values in A3:A9 and D3:D9			
0.027	= Q stream (cfs)	0.5	= CV Daily
0.002	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance 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 = 2.803	1.3.2.iii	WLA cfc = 2.725
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 1.044	5.1d	LTA_cfc = 1.584

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500	BAT/BPJ
		INST MAX LIMIT (mg/l) = 1.635	

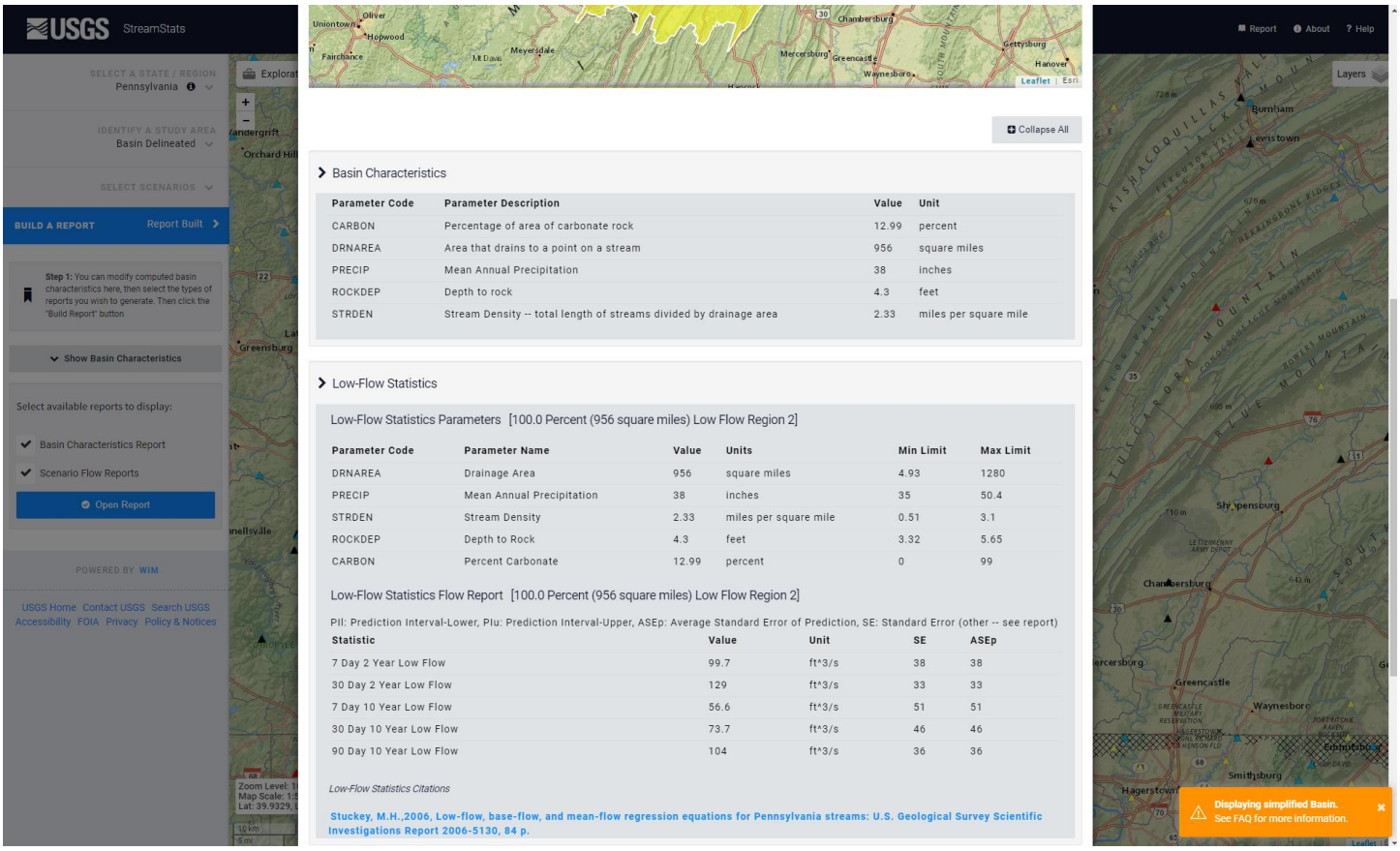
WLA afc	(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))... ...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
WLA_cfc	(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))... ...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT_cfc	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)



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	0.45	square miles
PRECIP	Mean Annual Precipitation	37	inches
ROCKDEP	Depth to rock	3	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	2.65	miles per square mile

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.45	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	37	inches	35	50.4
STRDEN	Stream Density	2.65	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	3	feet	3.32	5.65
CARBON	Percent Carbonate	0	percent	0	99

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.00743	ft^3/s
30 Day 2 Year Low Flow	0.0132	ft^3/s
7 Day 10 Year Low Flow	0.00159	ft^3/s
30 Day 10 Year Low Flow	0.0031	ft^3/s
90 Day 10 Year Low Flow	0.00763	ft^3/s



Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	12.99	percent
DRNAREA	Area that drains to a point on a stream	956	square miles
PRECIP	Mean Annual Precipitation	38	inches
ROCKDEP	Depth to rock	4.3	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	2.33	miles per square mile

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	956	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	38	inches	35	50.4
STRDEN	Stream Density	2.33	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4.3	feet	3.32	5.65
CARBON	Percent Carbonate	12.99	percent	0	99

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	99.7	ft^3/s	38	38
30 Day 2 Year Low Flow	129	ft^3/s	33	33
7 Day 10 Year Low Flow	56.6	ft^3/s	51	51
30 Day 10 Year Low Flow	73.7	ft^3/s	46	46
90 Day 10 Year Low Flow	104	ft^3/s	36	36

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 Daily Max	XXX	XXX	XXX	XXX	2/month	Measured
TRC	XXX	XXX	XXX	0.5	XXX	1.6	2/month	Grab
BOD5	XXX	XXX	XXX	25.0	XXX	50	2/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60	2/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab

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	2/month	Measured
TRC	XXX	XXX	XXX	0.5	XXX	1.6	2/month	Grab
BOD5	XXX	XXX	XXX	25.0	XXX	50.0	2/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	2/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab

Compliance Sampling Location: