Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0087025**
Facility Type	**Non-Municipal**	APS ID	**20**
Major / Minor	**Minor**	Authorization ID	**1494328**

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**David M Ott**	Facility Name	**Dave & Janes Crab House Restaurant**
Applicant Address	2989 Tract Road	Facility Address	2989 Tract Road
	Fairfield, PA 17320-9333		Fairfield, PA 17320-9333
Applicant Contact	Dave Ott	Facility Contact	Dave Ott
Applicant Phone	(717) 642-5025	Facility Phone	(717) 642-5025
Client ID	92214	Site ID	461077
Ch 94 Load Status	Not Overloaded	Municipality	Liberty Township
Connection Status		County	Adams
Date Application Received	July 31, 2024	EPA Waived?	Yes
Date Application Accepted	August 28, 2024	If No, Reason	

Purpose of Application: NPDES permit renewal.

Summary of Review

Dave & Jane's Crab House Restaurant 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 January 28, 2020, and became effective on February 1, 2020.

The permit authorized discharge of treated sewage from the existing wastewater treatment plant (WWTP) located in Liberty Township, Adams County to Flat Run. The existing permit expiration date was January 31, 2025.

WQM No. 0195405 was issued on 2/26/1997.

Sludge use and disposal description and location(s): N/A

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	January 17, 2025
X		*Maria D. Bebenek for* Daniel W. Martin, P.E. / Environmental Engineer Manager	January 27, 2025

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0034
Latitude	39º 43' 16.19"	Longitude	-77º 20' 27.99"
Quad Name	Emmitsburg	Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Flat Run (WWF)	Stream Code	58724
NHD Com ID	53322090	RMI	3.67 miles
Drainage Area	7.13 mi.^{2}	Yield (cfs/mi^2)	0.04
Q_{7-10} Flow (cfs)	0.305	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	446	Slope (ft/ft)	
Watershed No.	13-D	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Not Assessed		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	City of Frederick, MD		
PWS Waters	Monocacy River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	Approximate 31 miles

Changes Since Last Permit Issuance:

Drainage Area
The discharge is to Unnamed Tributary to Flat Run at RMI 3.67 miles. A drainage area upstream of the discharge is estimated to be 7.13 mi.^{2}, according to USGS PA StreamStats available at https://streamstats.usgs.gov/ss/. The Q_{7-10} is 0.305 cfs, then the low flow yield is 0.04 cfs/mi.^{2}.

Flat Run
25 Pa. Code § 93.9z classifies Flat Run as warm water fishes (WWF) surface water.

Potable Water Supply Intake
The nearest downstream public water supply intake is the City of Frederick, MD intake on the Monocacy River, approximately 31 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: Dave & Janes Crabhouse				
WQM Permit No.	**Issuance Date**			
0195405	2/26/1967			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Secondary	Extended Aeration	Hypochlorite	0.0034
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.0034		Not Overloaded	Anaerobic Digestion	Other WWTP

Changes Since Last Permit Issuance:

Other Comments:

The treatment process is as follows: Grease Trap (1) – Septic Tanks (2) - Aeration Tank (1) – Chlorine Contact Tank (1) – Final Effluent Tank (1) – Blower (1) – Discharge (Outfall 001)

Septic tanks and a grease trap are cleaned every 5 to 6 months.

Compliance History	
Summary of DMRs:	A summary of past 12-month DMRs is presented on the next page.
Summary of Inspections:	10/24/2023: Mr. Hoy, DEP WQS, conducted the compliance evaluation inspection. The recommendations were as follows: testing alarm monthly and recording the test in the daily logbook and recording the monthly settleability test in the daily logbook. Requests were as follows: completing and submitting the electronic daily effluent & sewage sludge supplemental reports to eDMR monthly as required by NPDES permit and keeping copies readily available to review for future inspections, storing the sample chain of custody records on-site, retaining sludge use and disposal records for a period of at least 5 years as required by NPDES permit, replacing the expired pH buffers as soon as possible, and the Total Phosphorous samples are collected as 8-hour composite samples in accordance with NPDES permit requirements. Four were violations such as: failure to use current pH buffers or reagent standards (25 Pa. Code 92a.41(a)(10)), failure to submit a required DMR supplemental report (25 Pa. Code 92a.41(a)(12)), failure to provide information or records required by the permit or otherwise needed to determine compliance (25 Pa. Code 92a.41(a)(8)), and failure to monitor pollutants as required by the NPDES permit (25 Pa Code 92a.61(c)).
Other Comments:	There are currently three open violations associated with the permittee or the facility. 10/24/23: CSL201-Unauthorized, unpermitted discharge of sewage to waters of the commonwealth, 271.918-Biosolids-Permittee violated the record keeping requirements, and 92a.41(a)12B-NPDES-Failure to submit monitoring report(s) or properly complete monitoring reports.

Other Comments:

Compliance History

DMR Data for Outfall 001 (from December 1, 2023 to November 30, 2024)

Parameter	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23
Flow (MGD) Average Monthly	0.000399	0.000421	0.000427	0.000414	0.000383	0.000347	0.000317	0.000303	0.000273	0.000274	0.000294	
Flow (MGD) Daily Maximum	0.000410	0.000430	0.000440	0.000420	0.000405	0.000365	0.000330	0.000315	0.000285	0.000290	0.000340	
pH (S.U.) Daily Minimum	7.4	7.6	7.7	7.9	8.1	8.1	8.1	8.0	7.2	7.3	7.4	
pH (S.U.) Instantaneous Maximum	8.0	7.9	8.2	8.5	8.7	8.6	8.5	8.5	8.0	8.0	7.9	
DO (mg/L) Daily Minimum	6.6	6.4	6.3	6.0	5.3	6.6	6.6	6.6	5.8	8.4	7.4	
TRC (mg/L) Average Monthly	0.38	0.28	0.31	0.38	0.33	0.41	0.42	0.37	0.35	0.36	0.41	
TRC (mg/L) Instantaneous Maximum	0.47	0.34	0.36	0.47	0.40	0.47	0.48	0.42	0.49	0.42	0.48	
CBOD5 (mg/L) Average Monthly	14.2	5.3	3.7	4.0	60.3	3.7	5.2	1.6	54.2	96.6	13.0	
CBOD5 (mg/L) Instantaneous Maximum	15.7	5.5	4.5	5.5	117.0	4.4	6.0	2.1	103.0	109.0	15.7	
TSS (mg/L) Average Monthly	9.5	11.0	18.0	19.5	24.5	18.5	11.5	5.5	11.0	31.0	10.0	
TSS (mg/L) Instantaneous Maximum	10.0	12.0	27.0	28.0	39.0	31.0	12.0	6.0	16.0	42.0	19.0	
Oil and Grease (mg/L) Average Monthly	1.0	1.0	1.0	1.0	6.3	1.0	1.0	1.0	6.0	5.2	1.0	
Oil and Grease (mg/L) Instantaneous Maximum	1.0	1.0	1.0	1.0	6.3	1.0	1.0	1.0	6.0	5.2	1.0	
Fecal Coliform (No./100 ml) Geometric Mean	1.0	3.3	29.9	49.2	49.3	36.1	12.4	49.8	69.6	69.6	69.6	
Fecal Coliform (No./100 ml) Instantaneous Maximum	1.0	11.0	687	2419.6	2419.6	1300	132.0	1990	4839.2	2419.6	2419.6	

Total Nitrogen (mg/L) Annual Average												0.238
Total Phosphorus (mg/L) Annual Average												1.4

Existing Effluent Limitations and Monitoring Requirements

Outfall 001,

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	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	0.5	XXX	1.2	1/day	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50.0	2/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	2/month	Grab
Oil and Grease	XXX	XXX	XXX	15.0	XXX	30.0	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Calculation

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0034
Latitude 39º 43' 16.19" **Longitude** -77º 20' 27.99"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

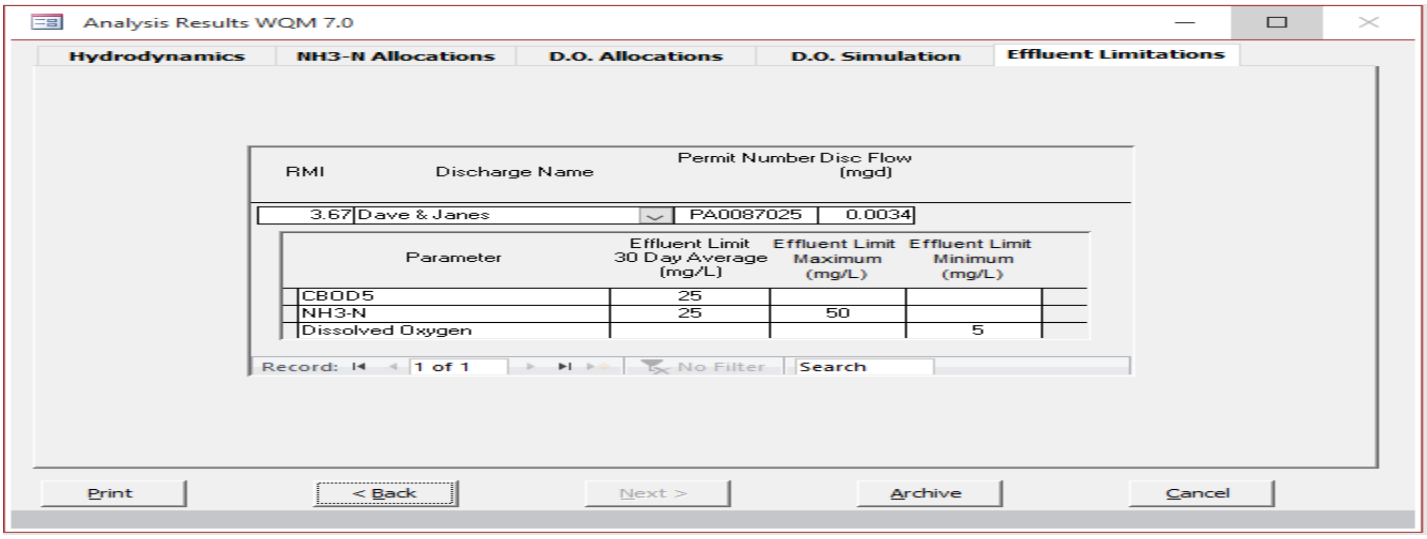
Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	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)

Comments:

Water Quality-Based Limitations

Ammonia (NH_3-N):
NH_3-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 NH_3-N criteria used in the attached computer model of the stream:

- Discharge pH = 7.0 (Default)
- Discharge Temperature = 25°C (Default)
- Stream pH = 7.0 (Default)
- Stream Temperature = 20ºC (Default)
- Background NH_3-N = 0 (Default)



The attached computer printout of the WQM7.0 stream model shows that no NH_3-N requirements are needed to protect the aquatic life from NH_3-N toxicity.

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. 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.

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 concentrations under these limits.

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.

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

Oil & Grease:
The oil & grease limits are required for restaurant waste per 25 Pa. Code § 95.2 (2)(ii). The average monthly limit of 15.0 mg/L and daily maximum limit of 30.0 mg/L in existing permit will remain in the proposed permit.

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.

Chesapeake Bay Strategy:
The Department formulated a strategy to comply with the EPA and Chesapeake Bay Foundation requirements by reducing point source loadings of Total Nitrogen (TN) and Total Phosphorus (TP). Sewage discharges have been prioritized by Central Office based on their delivered TN loadings to the Bay. The highest priority (Phases 1, 2, and 3) dischargers will receive annual loading caps based on their design flow on August 29, 2005 and concentrations of 6 mg/L TN and 0.8 mg/L TP. These limits may be achieved through a combination of treatment technology, credits, or offsets. Phase 4 (0.2 -0.4 MGD) will be required to monitor and report TN and TP during permit renewal monthly and Phase 5 (below 0.2 MGD) will monitor during current permit renewal once a year. However, any facility in Phases 4 and 5 that undergoes expansion is subjected to cap load right away. This plant is classified as a phase 5, will be required to monitor and report TN & TP once a year, and these monitoring requirements will remain in the proposed permit.

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), indicated monthly average limit of 0.5 mg/L and an instantaneous maximum limit of 1.6 mg/L. However, the existing IMAX limit of 1.2 mg/L is more stringent than new IMAX limit recommended by the spreadsheet, the existing IMAX limit will remain in the proposed permit. The average monthly limit of 0.5 mg/L is in existing permit. Based on the DMRs from the past year, the facility has been consistently achieving these limits. Therefore, these limits will remain in the proposed permit.

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.305	= Q stream (cfs)	0.5	= CV Daily
0.0034	= 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 = 18.517	1.3.2.iii	WLA cfc = 18.045
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 6.900	5.1d	LTA_cfc = 10.490

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)**

Additional Consideration

Flow Monitoring
The requirement to monitor the volume of effluent will remain in the proposed 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 D.O., TRC, and pH; bi-monthly effluent grab samples of $CBOD_5$, TSS, Fecal Coliform, and Oil & Grease; annually effluent 8-hr composite samples of TP; and annually effluent calculation samples of TN. 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 and monitoring requirements have been established to ensure that the existing instream 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.

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

303d Listed Streams

The 2012 Pennsylvania Integrated Water Quality Monitoring and Assessment Report (formerly 303(d) list) groups Flat Run in List 2, *Attaining some designated uses and insufficient or no data available for remaining uses*. Flat Run is currently unassessed; therefore, the stream condition is unknown. A Total Maximum Daily Load (TMDL) has not been developed for this stream.

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).

WQM 7.0

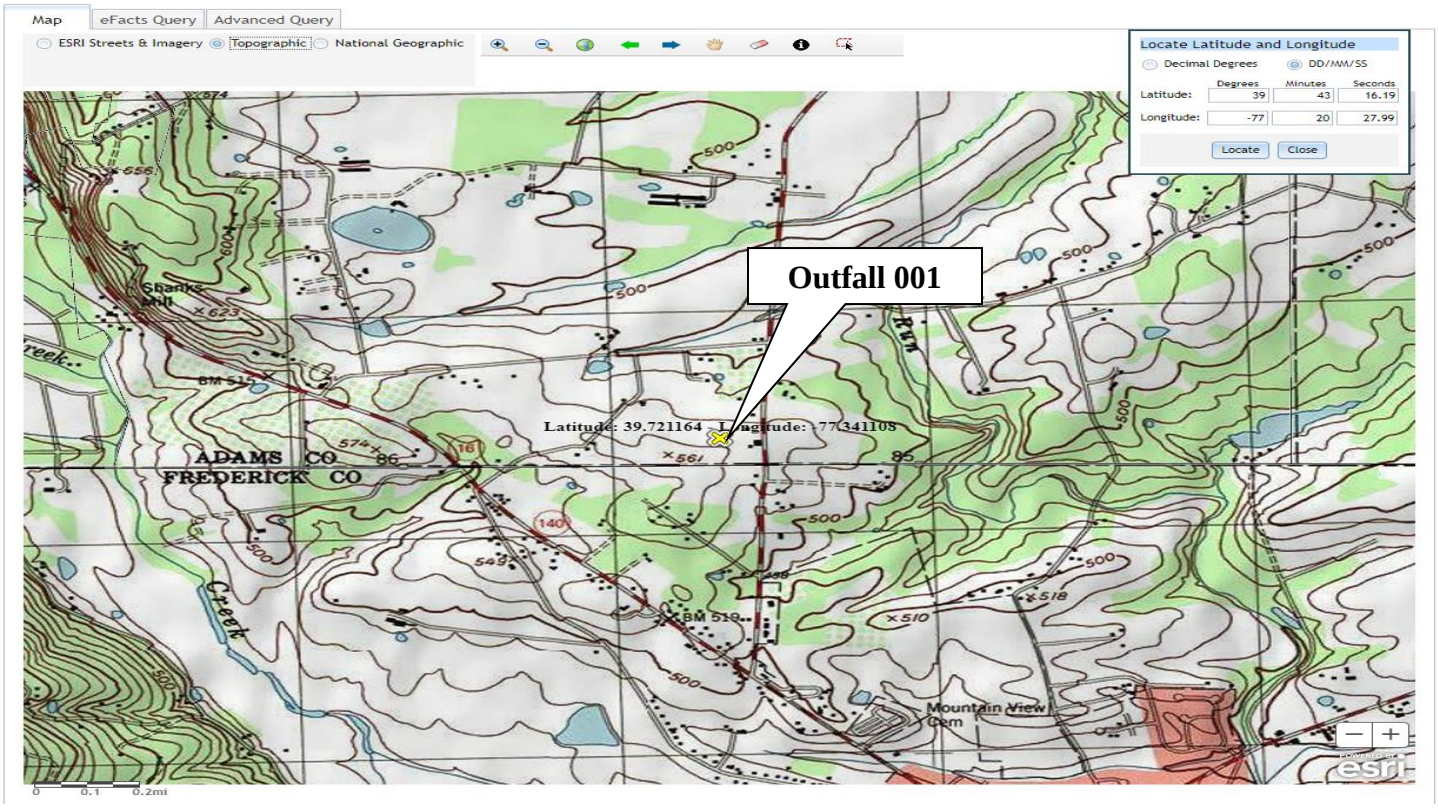
*	Discharge pH	=	7.0	(Default)
*	Discharge Temperature	=	25°C	(Default)
*	Stream pH	=	7.0	(Default)
*	Stream Temperature	=	20°C	(Default)
*	Background NH_3-N	=	0	(Default

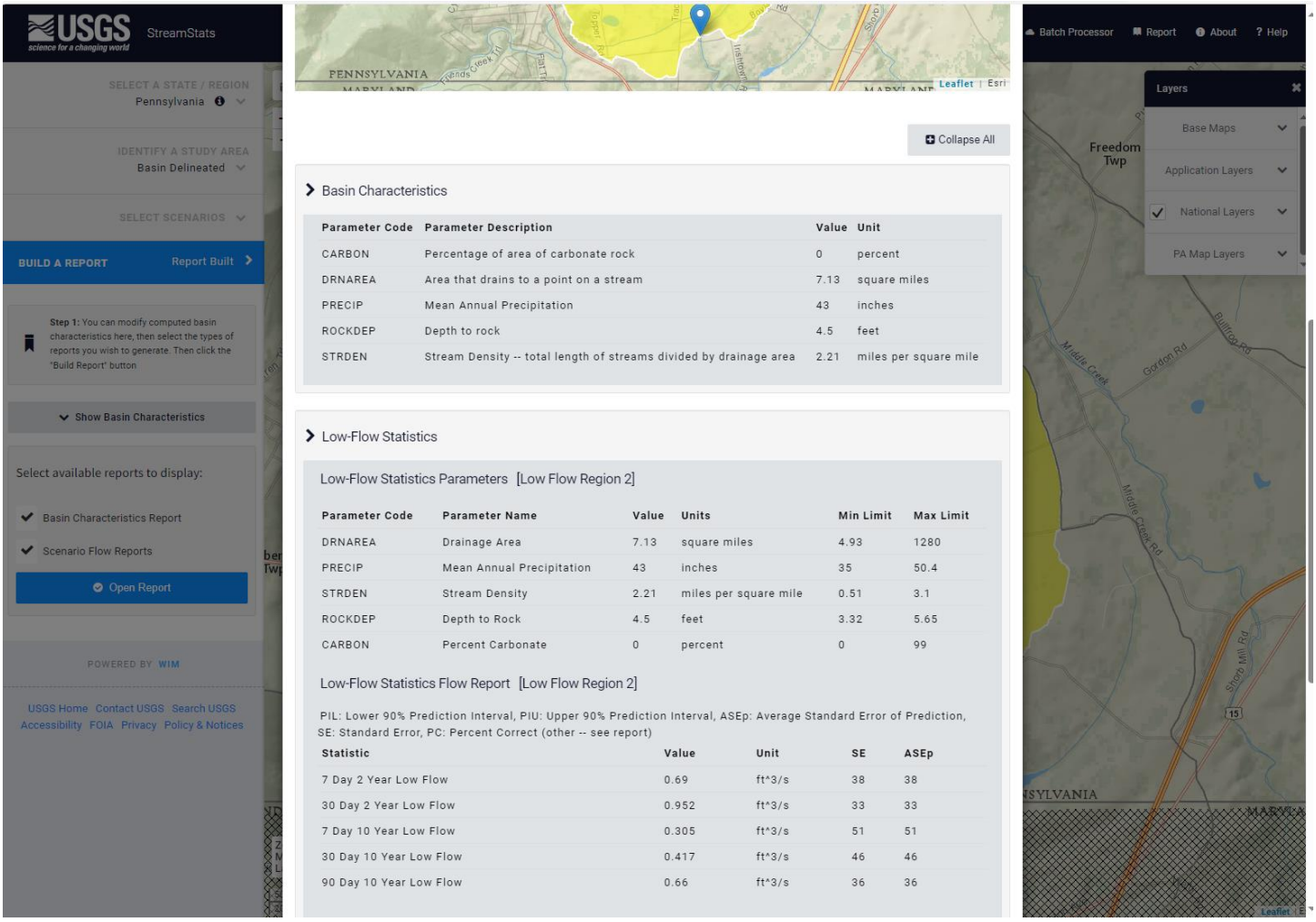
Node 1: Point of First Use on Flat Run (58724)

Elevation:	446 ft (USGS National Map Viewer)
Drainage Area:	7.13 $mi.^2$ (USGS PA StreamStats)
River Mile Index:	3.67 miles (PA DEP eMapPA)
Low Flow Yield:	0.04 $cfs/mi.^2$
Discharge Flow:	0.0034 MGD (NPDES PA0087025)

Node 2: Just before PA & MA Border on Flat Run

Elevation:	441 ft (USGS National Map Viewer)
Drainage Area:	7.38 $mi.^2$ (USGS PA StreamStats)
River Mile Index:	3.39 mile (PA DEP eMapPA)
Low Flow Yield:	0.04 $cfs/mi.^2$
Discharge Flow:	0.00 MGD




USGS
StreamStats
SELECT A STATE / REGION
Pennsylvania
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
Open Report
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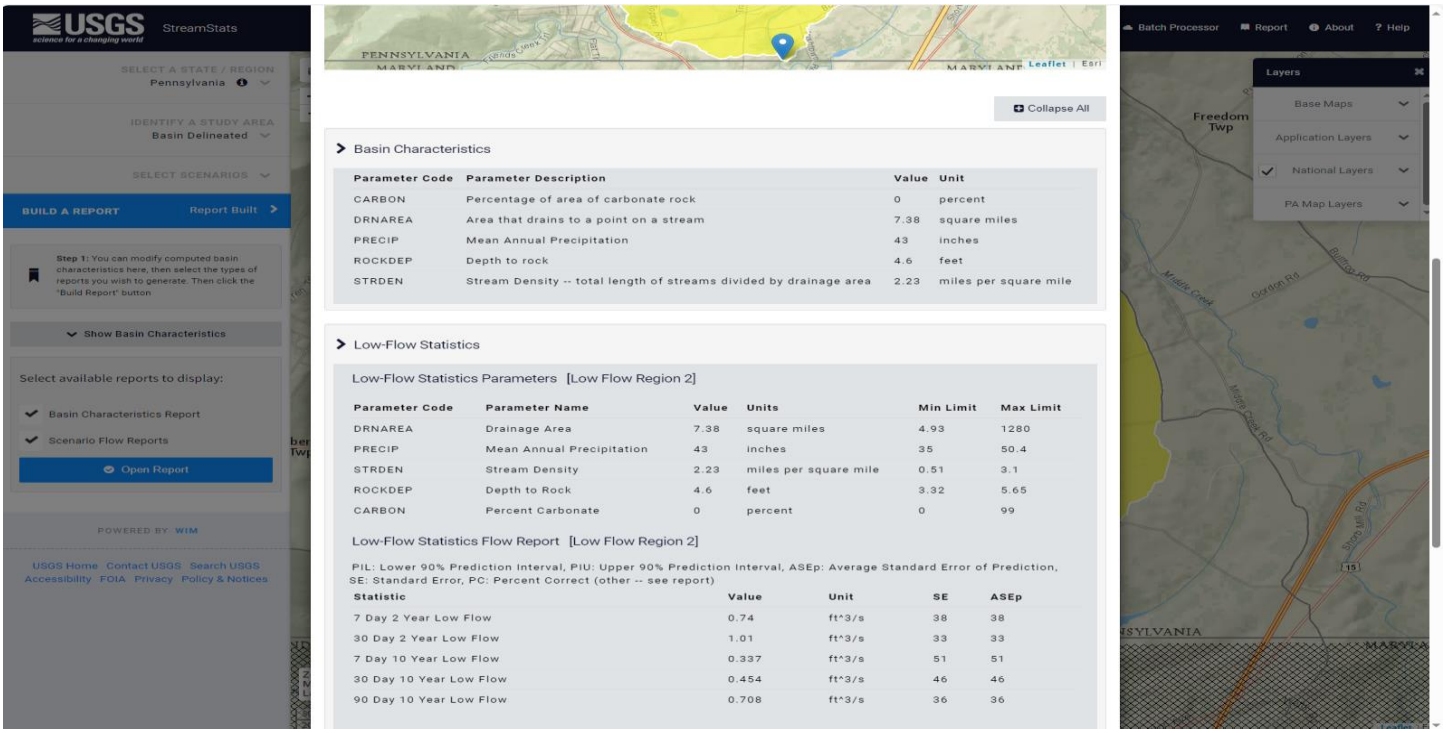
MARYLAND
Leaflet | Esri
Collapse All
Basin Characteristics
Parameter Code | Parameter Description | Value | Unit
CARBON | Percentage of area of carbonate rock | 0 | percent
DRNAREA | Area that drains to a point on a stream | 7.13 | square miles
PRECIP | Mean Annual Precipitation | 43 | inches
ROCKDEP | Depth to rock | 4.5 | feet
STRDEN | Stream Density -- total length of streams divided by drainage area | 2.21 | miles per square mile
Low-Flow Statistics
Low-Flow Statistics Parameters [Low Flow Region 2]
Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit
DRNAREA | Drainage Area | 7.13 | square miles | 4.93 | 1280
PRECIP | Mean Annual Precipitation | 43 | inches | 35 | 50.4
STRDEN | Stream Density | 2.21 | miles per square mile | 0.51 | 3.1
ROCKDEP | Depth to Rock | 4.5 | feet | 3.32 | 5.65
CARBON | Percent Carbonate | 0 | percent | 0 | 99
Low-Flow Statistics Flow Report [Low Flow Region 2]
PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct (other -- see report)
Statistic | Value | Unit | SE | ASEp
7 Day 2 Year Low Flow | 0.69 | ft^3/s | 38 | 38
30 Day 2 Year Low Flow | 0.952 | ft^3/s | 33 | 33
7 Day 10 Year Low Flow | 0.305 | ft^3/s | 51 | 51
30 Day 10 Year Low Flow | 0.417 | ft^3/s | 46 | 46
90 Day 10 Year Low Flow | 0.66 | ft^3/s | 36 | 36
Batch Processor
Report
About
Help
Layers
Base Maps
Application Layers
National Layers
PA Map Layers
Freedom Twp
Middle Creek
Gordon Rd
Bullfrog Rd
Middle Creek Rd
Stony Mill Rd
15
Leaflet


USGS
StreamStats
SELECT A STATE / REGION
Pennsylvania
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
Open Report
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PENNSYLVANIA
MARYLAND
Leaflet | Esri
Collapse All
Basin Characteristics
Parameter Code | Parameter Description | Value | Unit
CARBON | Percentage of area of carbonate rock | 0 | percent
DRNAREA | Area that drains to a point on a stream | 7.38 | square miles
PRECIP | Mean Annual Precipitation | 43 | inches
ROCKDEP | Depth to rock | 4.6 | feet
STRDEN | Stream Density -- total length of streams divided by drainage area | 2.23 | miles per square mile
Low-Flow Statistics
Low-Flow Statistics Parameters [Low Flow Region 2]
Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit
DRNAREA | Drainage Area | 7.38 | square miles | 4.93 | 1280
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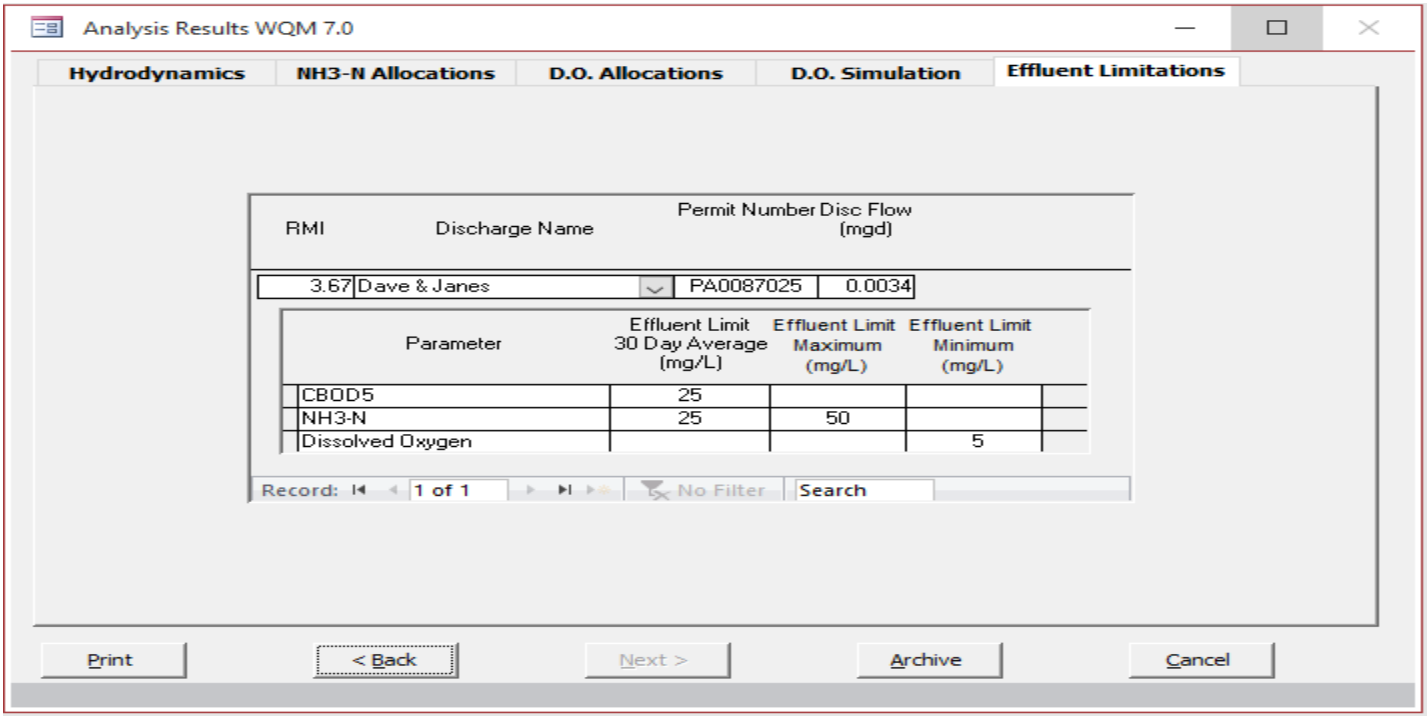
STRDEN | Stream Density | 2.23 | miles per square mile | 0.51 | 3.1
ROCKDEP | Depth to Rock | 4.6 | feet | 3.32 | 5.65
CARBON | Percent Carbonate | 0 | percent | 0 | 99
Low-Flow Statistics Flow Report [Low Flow Region 2]
PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct (other -- see report)
Statistic | Value | Unit | SE | ASEp
7 Day 2 Year Low Flow | 0.74 | ft^3/s | 38 | 38
30 Day 2 Year Low Flow | 1.01 | ft^3/s | 33 | 33
7 Day 10 Year Low Flow | 0.337 | ft^3/s | 51 | 51
30 Day 10 Year Low Flow | 0.454 | ft^3/s | 46 | 46
90 Day 10 Year Low Flow | 0.708 | ft^3/s | 36 | 36
Batch Processor
Report
About
Help
Layers
Base Maps
Application Layers
National Layers
PA Map Layers
Freedom Twp
Middle Creek
Gordon Rd
Bullfrog Rd
Stony Mill Rd
15


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)
3.67
Dave & Janes
PA0087025
0.0034
Parameter
Effluent Limit 30 Day Average (mg/L)
Effluent Limit Maximum (mg/L)
Effluent Limit Minimum (mg/L)
CBOD5
25
NH3-N
25
50
Dissolved Oxygen
5
Record: 1 of 1
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Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
D.O.	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/day	Grab
$CBOD_5$	XXX	XXX	XXX	25.0	XXX	50.0	2/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	2/month	Grab
Oil and Grease	XXX	XXX	XXX	15.0	XXX	30.0	2/month	Grab
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
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Calculation
Total Phosphorus	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	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, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☒	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☒	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☒	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 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, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 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, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☒	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☒	SOP: BCW-PMT-033
☐	Other: