pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0020508**
Facility Type	**Municipal**	APS ID	**16695**
Major / Minor	**Minor**	Authorization ID	**1315225**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**McConnellsburg Sewer Authority Fulton County**	Facility Name	**McConnellsburg STP**
Applicant Address	PO Box 681	Facility Address	20789 Great Cove Road
	McConnellsburg, PA 17233-0681		McConnellsburg, PA 17233
Applicant Contact	Craig Strait	Facility Contact	Craig Strait
Applicant Phone	(717) 485-4728	Facility Phone	(717) 485-4728
Client ID	36766	Site ID	251564
Ch 94 Load Status	Not Overloaded	Municipality	McConnellsburg Borough
Connection Status	No Limitations	County	Fulton
Date Application Received	April 28, 2020	EPA Waived?	No
Date Application Accepted	May 29, 2020	If No, Reason	Significant CB Discharge

Purpose of Application: NPDES Renewal.

Summary of Review

McConnellsburg Sewerage Authority has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit. The permit was last reissued on November 23, 2015 and became effective on December 1, 2015. The permit will be expired on November 30, 2020.

The facility has an average annual design flow of 0.6 MGD that discharges to Big Cove Creek. The application states the following flow contribution sources: McConnellsburg Borough (41.3%), Ayr Township (30.2%), and Todd Township (28.5%).

WQM Part II No. 2998401 original was issued on June 25, 1999, and amendment issued on October 20, 2010. The WQM Part II extensions & pumping stations No. 2900402 was issued on December 21, 2000.

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.

Approve	Deny	Signatures	Date
X		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	November 4, 2020
		Daniel W. Martin, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.6
Latitude	39º 55' 32.97"	Longitude	-78º 0' 20.27"
Quad Name	Meadow Grounds	Quad Code	
Wastewater Description:	Effluent		
Receiving Waters	Big Cove Creek (CWF, MF)	Stream Code	60482
NHD Com ID	49470424	RMI	15.13
Drainage Area	7.4 $mi.^2$	Yield (cfs/mi^2)	See comments below
Q_{7-10} Flow (cfs)	See comments below	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	848.58	Slope (ft/ft)	
Watershed No.	13-B	Chapter 93 Class.	CWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	NUTRIENTS, SILTATION		
Source(s) of Impairment	GRAZING IN RIPARIAN OR SHORELINE ZONES		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	R.C Wilson Water Treatment Plant		
PWS Waters	Potomac River	Flow at Intake (cfs)	
PWS RMI	26 miles to PA-MA border	Distance from Outfall (mi)	Approximate 38.84 miles

Changes Since Last Permit Issuance: none

Drainage Area

The discharge is to Big Cove Creek at RMI 15.13 miles. A drainage area upstream of the discharge is estimated to be 7.4 $mi.^2$, 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 StreamStats on Licking Creek at the PA/MD border will be used to calculate the Q_{7-10} at the point of discharge using a low flow yield method. The Q_{7-10} here is 6.03 cfs and the drainage area is 159 $mi.^2$ which results in a Q_{7-10} low flow yield of 0.038 $cfs/mi.^2$. 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):

$$\text{Low Flow Yield} = Q_{7-10} / \text{Drainage Area} = 6.03 \text{ cfs} / 159 \text{ mi.}^2 = 0.038 \text{ cfs/mi.}^2$$
$$Q_{7-10discharge} = 0.038 \text{ cfs/mi.}^2 * \text{Drainage Area}_{discharge} = 0.038 \text{ cfs/mi.}^2 * 7.4 \text{ mi.}^2 = 0.3 \text{ cfs}$$
$$Q_{30-10} = 1.36 * Q_{7-10discharge} = 1.36 * 0.28 \text{ cfs} = 0.38 \text{ cfs}$$
$$Q_{1-10} = 0.64 * Q_{7-10discharge} = 0.64 * 0.28 \text{ cfs} = 0.18 \text{ cfs}$$

The resulting Q_{7-10} dilution ratio is: $Q_{stream} / Q_{discharge}$ = 0.3 cfs / [0.6 MGD * (1.55 cfs/MGD)] = 0.32:1

Big Cove Creek

25 Pa Code § 93.9z classifies Big Cove Creek as Cold Water and Migratory Fishes (CWF, MF) surface water. Based on the 2018 Integrated Report, Big Cove Creek, assessment unit IDs 6138 & 19105, 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 closest downstream water supply intake from the discharge point is for the Hagerstown City water supply. The R.C. Wilson Water Treatment Plant near Williamsport, Maryland is the main production plant for the City of Hagerstown. The source for this facility is the Potomac River. The distance downstream from the discharge to the intake is approximately 38.84 miles. The discharge will not impact the intake because of the distance, dilution, and effluent limits.

Treatment Facility Summary				

Treatment Facility Name: McConnellsburg STP

WQM Permit No.	Issuance Date	Reason
2998401	6/26/1999	New
2998401 10-1	10/20/2010	Amendment
2900402	12/21/2000	New (extension & pumping Station)

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage			Hypochlorite	0.6

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.6	1,380	Not Overloaded		

Changes Since Last Permit Issuance: none

The treatment process, according to the revised application, is as follows:

Lift Station → Fine Screen/Grit Removal → EQ Tank (1) → Sludge Storage Tanks (2) → Clarifiers (2) → Chlorine Contact Tank (1) → Dechlorination (1) → Aeration Tank (1) → Outfall 001

The chemical is sued at treatment Sodium Hypochlorite (liquid) for disinfection, Sodium Bisulfite (liquid) for dechlorination, and DelPAC 2000 for Phosphorus removal.

Compliance History	
Summary of DMRs:	DMRs reported last 12 months from October 1, 2019 to September 30, 2020 are summarized in the Table below (Pages 5, & 6).
Summary of Inspections:	9/26/2019: Mr. Clark, DEP WQS, conducted compliance evaluation inspection. The recommendations were created and post for daily check of the treatment plant, and updated DMR supplemental forms. The effluent was clear. The field test results were within permit limits. The sample tests results were within the permit limits. 11/1/2018: Mr. Clark, DEP WQS, conducted compliance evaluation inspection. The recommendations were created and post for daily check of the treatment plant. The field test results were within permit limits. There were no violations noted during inspection. 10/26/2017: Mr. Clark, DEP WQS, conducted compliance evaluation inspection. The field test results were within permit limits. There were no violations noted during inspection.
Other Comments:	There is one open violation on safety drinking water plant associated with the permittee or the facility.

Other Comments:

The table below summarizes the influent/effluent testing results submitted along with the application.

Influent Testing Results

Parameter	Min/Max Value	Average Value
BOD_5 (mg/L)	366 mg/L	177 mg/L
BOD_5 (lbs/day)	954 lbs/day	522 lbs/day
TSS (mg/L)	618 mg/L	205 mg/L
TSS (lbs/day)	1557 lbs/day	592 lbs/day
TN (mg/L)	37.73 mg/L	37.73 mg/L
TN (lbs/day)	87.47 lbs/day	87.47 lbs/day
TP (mg/L)	5.68 mg/L	4.42 mg/L
TP (lbs/day)	11.56 lbs/day	9.47 lbs/day
NH_3-N (mg/L)	32.87 mg/L	32.87 mg/L
NH_3-N (lbs/day)	76.21 lbs/day	76.21 lbs/day
TDS (mg/L)	824 mg/L	824 mg/L
TDS (lbs/day)	1821 lbs/day	1821 lbs/day
TKN	41.75 mg/L	29.85 mg/L
NO_2-N + NO_3-N	<0.046 mg/L	<0.046 mg/L

Effluent Testing Results

Parameter	Min/Max Value	Average Value
pH (minimum)	6.8 S.U.	
pH (maximum)	7.9 S.U.	
D.O (minimum)	6.7 mg/L	mg/L
TRC	0.27 mg/L	0.03 mg/L
Fecal Coliform	387 No./100mL	4.0 No./100 mL
$CBOD_5$	15.3 mg/L	3.82 mg/L
TSS	24.0 mg/L	6.67 mg/L
NH_3-N	3.03 mg/L	0.16 mg/L
TN	12.39 mg/L	4.55 mg/L
TP	0.47 mg/L	0.14 mg/L
Temp	51.1 F	62.6 F
TKN	4.27 mg/L	1.03 mg/L
NO_2-N + NO_3-N	9.86 mg/L	3.52 mg/L
TDS	772 mg/L	745 mg/L
Chloride	171 mg/L	149 mg/L
Bromide	< 0.116 mg/L	< 0.069 mg/L
Sulfate	152 mg/L	146 mg/L
Oil and Grease	< 5.25 mg/L	<4.44 mg/L
Total Copper	0.0083 mg/L	0.0083 mg/L
Total Lead	< 0.0005 mg/L	< 0.0005 mg/L
Total Zinc	0.0952 mg/L	0.0952 mg/L

Compliance History

DMR Data for Outfall 001 (from October 1, 2019 to September 30, 2020)

Parameter	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19
Flow (MGD) Average Monthly	0.189	0.191	0.178	0.207	0.253	0.286	0.265	0.254	0.278	0.234	0.233	0.235
Flow (MGD) Daily Maximum	0.385	0.293	0.274	0.384	0.507	0.699	0.504	0.333	0.532	0.444	0.346	0.432
pH (S.U.) Minimum	7.5	7.5	7.3	7.4	7.1	6.9	7.3	7.4	7.2	7.3	7.3	7.2
pH (S.U.) Maximum	7.8	7.8	7.7	7.6	7.6	7.5	7.5	7.6	7.6	7.7	7.6	7.8
DO (mg/L) Minimum	7.4	7.2	6.7	7.7	7.0	7.1	7.5	7.9	6.5	8.5	7.9	7.7
TRC (mg/L) Average Monthly	0.02	0.02	0.02	0.02	0.02	0.01	0.03	0.03	0.02	0.02	0.02	0.03
TRC (mg/L) Instantaneous Max.	0.04	0.03	0.03	0.04	0.08	0.04	0.11	0.15	0.08	0.06	0.12	0.14
CBOD5 (lbs/day) Average Monthly	6.59	6.18	7.26	6.67	8.67	8.26	12.67	10.58	9.73	8.77	6.95	7.33
CBOD5 (lbs/day) Weekly Average	7.85	7.94	11.97	10.73	11.50	9.87	21.62	15.98	19.59	14.41	8.66	9.94
CBOD5 (mg/L) Average Monthly	4.01	3.89	4.37	3.67	4.30	3.67	5.50	4.91	4.12	3.97	3.0	3.41
CBOD5 (mg/L) Weekly Average	4.97	5.67	5.60	5.34	5.63	5.26	8.50	7.40	8.48	5.45	3.0	5.07
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	438	453	450	372	502	695	807	522	479	448	482	414
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	528	602	715	510	737	1285	948	737	624	534	643	653
BOD5 (mg/L) Raw Sewage Influent Average Monthly	271	280	279	214	250	293	363	244	203	244	209	189
TSS (lbs/day) Average Monthly	9.95	8.76	5.55	3.45	8.47	6.46	19.93	10.58	9.78	14.42	7.22	17.39
TSS (lbs/day) Raw Sewage Influent Average Monthly	424	312	492	413	545	659	464	404	386	452	607	672
TSS (lbs/day) Raw Sewage Influent Daily Maximum	673	499	713	788	753	1515	960	518	546	893	717	796
TSS (lbs/day) Weekly Average	17.34	12.01	10.05	5.20	13.03	11.23	27.15	13.26	20.33	35.74	10.39	33.71

TSS (mg/L) Average Monthly	5.64	5.7	3.48	1.95	4.05	6.46	8.95	4.90	4.16	5.30	3.10	8.28
TSS (mg/L) Raw Sewage Influent Average Monthly	259	207	309	227	283	271	214	191	168	207	264	306
TSS (mg/L) Weekly Average	9.0	8.0	4.40	3.00	4.40	4.40	12.0	6.00	8.80	10.40	4.40	17.20
Fecal Coliform (CFU/100 ml) Geometric Mean	12	2	4	1	15	2.0	2	1	3	1	2	1
Fecal Coliform (CFU/100 ml) Instantaneous Max.	22	4	210	1	299	7.0	4	4	12	2	4	1
Nitrate-Nitrite (mg/L) Average Monthly	3.42	3.76	4.48	4.28	3.24	4.70	3.93	3.09	3.42	3.43	3.04	3.79
Nitrate-Nitrite (lbs) Total Monthly	178.46	194.23	221.50	228.32	198.48	318.04	277.83	195.44	252.51	221.28	204.61	248.62
Total Nitrogen (mg/L) Average Monthly	4.04	5.08	4.98	5.19	3.74	5.22	4.58	3.59	3.93	4.11	4.04	4.79
Total Nitrogen (lbs) Net Total Monthly	211.16	255.56	246.55	275.19	230.23	354.10	323.78	227.07	290.28	265.38	272.26	314.01
Total Nitrogen (lbs) Total Monthly	211.16	255.56	246.55	275.19	230.23	354.10	323.78	227.07	290.28	265.38	272.26	314.01
Ammonia (lbs/day) Average Monthly	0.18	0.17	0.16	0.18	0.20	0.23	0.26	0.22	0.24	0.32	0.37	0.30
Ammonia (mg/L) Average Monthly	0.1	0.10	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.15	0.15
Ammonia (lbs) Total Monthly	5.43	5.22	5.01	5.28	6.35	6.86	6.95	6.33	7.39	9.78	11.09	9.45
TKN (mg/L) Average Monthly	0.62	1.32	0.5	0.91	0.50	0.52	0.66	0.5	0.51	0.68	1.0	1.0
TKN (lbs) Total Monthly	32.70	61.33	25.05	46.87	31.75	36.06	45.95	31.64	37.77	44.10	67.65	65.38
Total Phosphorus (lbs/day) Average Monthly	1.55	1.28	2.28	0.80	0.30	0.84	0.30	0.15	0.30	0.27	0.35	0.58
Total Phosphorus (mg/L) Average Monthly	0.9	0.75	1.39	0.45	0.16	0.36	0.11	0.07	0.12	0.12	0.15	0.27
Total Phosphorus (lbs) Net Total Monthly	46.59	39.67	70.69	23.91	9.30	25.15	7.33	4.49	9.15	8.26	10.42	17.95
Total Phosphorus (lbs) Total Monthly	46.59	39.67	70.69	23.91	9.30	25.15	7.33	4.49	9.15	8.26	10.42	17.95

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.6
Latitude 39º 55' 32.97" **Longitude** -78º 0' 20.27"
Wastewater Description: 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)
Total Phosphorus	2.0	Average Monthly	-	BPJ, 96.5 (c)
	4.0	IMAX	-	-
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_3N 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 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 mg/L	(Default)

The model input data and results are attached. The printout of the WQM 7.0 output indicates that at a discharge of 0.6 MGD, limits (rounded according to the NPDES Technical Guidance 362-0400-001) of 2.71 mg/l as monthly average and 5.42 mg/l as instantaneous maximum limit during summer to protect water quality standards. However, the existing permit limits of 2.0 mg/l as monthly average and 4 mg/l as instantaneous maximum NH_3-N are more stringent and will remain in effect due to federal anti-backsliding policy. The winter effluent limit will be set at three-times the summer limits. Recent DMRs and inspection reports indicate that the facility has been consistently achieving these limits. Mass limits are calculated as follows:

Summer average monthly mass limit: 2.0 mg/L x 0.6 MGD x 8.34 = 10.0 lbs/day
Winter average monthly mass limit: 10.0 lbs/day x 3 = 30.0 lbs/day

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 renewal and current Department criteria.

Carbonaceous Biochemical Oxygen Demand ($CBOD_5$):
The attached WQM 7.0 modeling results show that secondary treatment is adequate to protect the water quality of the stream. Recent DMRs and inspection reports show that the facility has been consistently achieving concentrations below this existing limit. The WQM 7.0 model suggests a monthly average $CBOD_5$ limit may be 17.48 mg/l, however, the existing summer limit is 15.0 mg/l which is more stringent and will remain in effect. Mass limits are calculated as follows:

Average monthly mass limit: 15 mg/L x 0.6 MGD x 8.34 = 75.06 (75.0) lbs/day
Average weekly mass limit: 22.5 mg/L x 0.6 MGD x 8.34 = 112.59 (113.0) lbs/day

The winter season average monthly limit of 25.0 mg/l, average weekly limit of 40.0 mg/l, and instantaneous maximum limit of 50.0 mg/l will also remain in place. Mass limits are calculated as follows:

Average monthly mass limit: 25 mg/L x 0.6 MGD x 8.34 = 125.1 (125.0) lbs/day
Average weekly mass limit: 40 mg/L x 0.6 MGD x 8.34 = 200.16 (200.0) lbs/day

Recent DMRs and inspection reports show that the facility has been consistently achieving these limits.

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 1,000/100ml and 25 Pa. Code § 92a.47.(a)(5) requires a winter limit of 2,000/100ml as a geometric mean and an instantaneous maximum not greater than 10,000/100ml. Therefore, instantaneous maximum limits for summer and winter seasons will be introduced in this renewal to be consistent with regulations. Inspection reports are showing that the permittee is capable of meeting this requirement.

pH:
25 Pa. Code § 95.2(1) requires industrial wastes to control a pH effluent level of not less than 6.0 and not greater than 9.0 standard units (S.U.). These pH limits are currently specified in the existing permit. Sample results reported on past Discharge Monitoring Reports (DMRs) indicate that the effluent pH has ranged from 6.9 to 7.5 S.U. Accordingly, existing pH limits will remain unchanged.

Total Suspended Solids (TSS):
The existing technology-based limits of 30 mg/L average monthly, 45 mg/L average weekly, and 60 mg/L instantaneous maximum will remain in the permit based on the minimum level of effluent quality attainable by secondary treatment based on 25 Pa. Code § 92a.47 47 and 40CFR 133.102(b). Recent DMRs and inspection reports show that the facility has been consistently achieving these limits. Mass limits are calculated as follows:

Average monthly mass limit: 30 mg/L x 0.6 MGD x 8.34 = 150.12 (150.0) lbs/day
Average weekly mass limit: 45 mg/L x 0.6 MGD x 8.34 = 225.18 (225.0) lbs/day

Total Residual Chlorine (TRC):
The attached TRC_CALC printout utilizes the equations and calculations as presented in the Department's 2003 Implementation Guidance for Total Residual Chlorine (TRC) (Document ID#391-2000-015) for developing chlorine limitations. The attached printout indicates average monthly limit of 0.056 mg/L and instantaneous maximum limit of 0.18 mg/L that would be needed to prevent toxicity concerns. The existing permit limits were 0.08 mg/L average monthly and 0.28 mg/L IMAX. However, recent DMRs and inspection reports were 0.03 mg/L average monthly & 0.15 mg/L IMAX that the facility has been consistently achieving these limits. Therefore, a limit of 0.08 mg/l AML, and 0.28 mg/l IMAX are recommended again for this permit cycle.

Total Phosphorus:
The discharge from this facility is located on Big Cove Creek which is impaired due to nutrients and siltation approximately 0.4 miles downstream from the discharge point. In order to prevent, the effluent phosphorus level must be controlled in accordance with 25 Pa Code § 96.5(c). The Department has determined that limits specified in the existing permit are appropriate (i.e., 2.0 mg/L (average monthly), 4.0 mg/L (instantaneous maximum)) as these limits have been assigned to other facilities with similar technology. Accordingly, existing TP limits will remain in the proposed permit. See the EPA guidance, Nutrient Criteria Technical Guidance Manual – Rivers and Streams, 07/2000 EPA-822-B-00-002, for more information about nutrient impacts on streams. Mass limits are calculated as follows:

Average monthly mass limit: 2 mg/L x 0.6 MGD x 8.34 = 10.0 lbs/day

Temperature:
The facility temperature is not of concern at this time and no monitoring or limitation is necessary.

Toxics:

The Department needs to evaluate toxic pollutants of concern for water quality modeling and to facilitate determinations of reasonable potential to cause an excursion above water quality standards by using the "Toxic Screening Analysis" spreadsheet. First, the maximum effluent concentrations of pollutants reported in the application (i.e., Pages # 6) were entered in the spreadsheet to determine if the parameter (or pollutant) is a candidate for PENTOXSD modeling. The result is as follows:

TOXICS SCREENING ANALYSIS
WATER QUALITY POLLUTANTS OF CONCERN
VERSION 2.7

CLEAR FORM

Facility: **McConnellsburg Sewage Authority** NPDES Permit No.: **PA0020508** Outfall: **001**
Analysis Hardness (mg/L): **100** Discharge Flow (MGD): **0.6** Analysis pH (SU): **7**
Stream Flow, Q_{7-10} (cfs): **0.28**

	Parameter	Maximum Concentration in Application or DMRs (µg/L)	Most Stringent Criterion (µg/L)	Candidate for PENTOXSD Modeling?	Most Stringent WQBEL (µg/L)	Screening Recommendation
Group 1	Total Dissolved Solids	772000	500000	Yes		
	Chloride	171000	250000	Yes		
	Bromide	116	N/A	No		
	Sulfate	152000	250000	Yes		
Group 2	Total Aluminum		750			
	Total Antimony		5.6			
	Total Arsenic		10			
	Total Barium		2400			
	Total Beryllium		N/A			
	Total Boron		1600			
	Total Cadmium		0.271			
	Total Chromium	0.5	N/A	No		
	Hexavalent Chromium		10.4			
	Total Cobalt		19			
	Total Copper	0.83	9.3	No		
	Free Available Cyanide		5.2			
	Total Cyanide		N/A			
	Dissolved Iron		300			
	Total Iron		1500			
	Total Lead	0.5	3.2	No		
	Total Manganese		1000			
	Total Mercury		0.05			
	Total Nickel	5.1	52.2	No		
	Total Phenols (Phenolics)		5			
	Total Selenium		5.0			
	Total Silver		3.8			
	Total Thallium		0.24			
	Total Zinc	9.52	119.8	No		
	Total Molybdenum		N/A			

The attached PENTOX results indicate that WQBEL limits are not necessary for these parameters.

In addition, Total Dissolved Solids and its major constituents including Bromide, Chloride, and Sulfate have become statewide pollutants of concern and threats to DEP's mission to prevent violations of water quality standards. The requirement to monitor these pollutants must be considered under the criteria specified in 25 Pa. Code § 95.10 and the following January 23, 2014 DEP Central Office Directive:

For point source discharges and upon issuance or reissuance of an individual NPDES permit:

- Where the concentration of TDS in the discharge exceeds 1,000 mg/L, or the net TDS load from a discharge exceeds 20,000 lbs/day, and the discharge flow exceeds 0.1 MGD, Part A of the permit should include monitor and report for TDS, sulfate, chloride, and bromide. Discharges of 0.1 MGD or less should monitor and report for TDS, sulfate, chloride, and bromide if the concentration of TDS in the discharge exceeds 5,000 mg/L.

- Where the concentration of bromide in a discharge exceeds 1 mg/L and the discharge flow exceeds 0.1 MGD, Part A of the permit should include monitor and report for bromide. Discharges of 0.1 MGD or less should monitor and report for bromide if the concentration of bromide in the discharge exceeds 10 mg/L.

- Where the concentration of 1,4-dioxane (CAS 123-91-1) in a discharge exceeds 10 µg/l and the discharge flow exceeds 0.1 MGD, Part A of the permit should include monitor and report for 1,4-dioxane. Discharges of 0.1 MGD or less should monitor and report for 1,4-dioxane if the concentration of 1,4-dioxane in the discharge exceeds 100 µg/l.

McConnellsburg Sewage Authority reported the maximum effluent TDS concentration of 772 mg/L, chloride concentration of 171 mg/L, sulfate concentration of 152 mg/L, and non-detect for Bromide. Based upon the data provided in the application, monitor requirements for TDS, Sulfate, Chloride, and Bromide are not needed in the permit.

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

Oil and Grease:
The facility historically had no issues in regard to the presence of Oil and Grease in the effluent (also no visible film on the surface of the receiving water). Therefore, no monitoring of Oil and Grease is necessary.

Hauled-in wastes:
According to the permit renewal application, the hauled-in wastes are as follows:

Years	Type of waste(s) received	Location where received	Annual average volumes received (gallons)
Past three (3) years	Sludge from Todd Township package treatment plant	Wasting at pit at Sludge Pumping Facility	24,175
Next five (5) years	Sludge from Todd Township package treatment plant	Wasting at pit at Sludge Pumping Facility	25,000

PAG073522 general permit was issued on March 6, 2018 to the permittee to handle Exceptional Quality Biosolids.

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." The discharge is into Big Cove Creek which is classified as Cold Water Fishes (CWF) and Migratory Fishes (MF.) No High Quality (HQ) Waters are impacted by this discharge. No Exceptional Value (EV) Waters are impacted by this discharge.

Class A Wild Trout Streams:

No Class A Wild Trout Fishery will be impacted by this discharge.

303d Listed Streams:

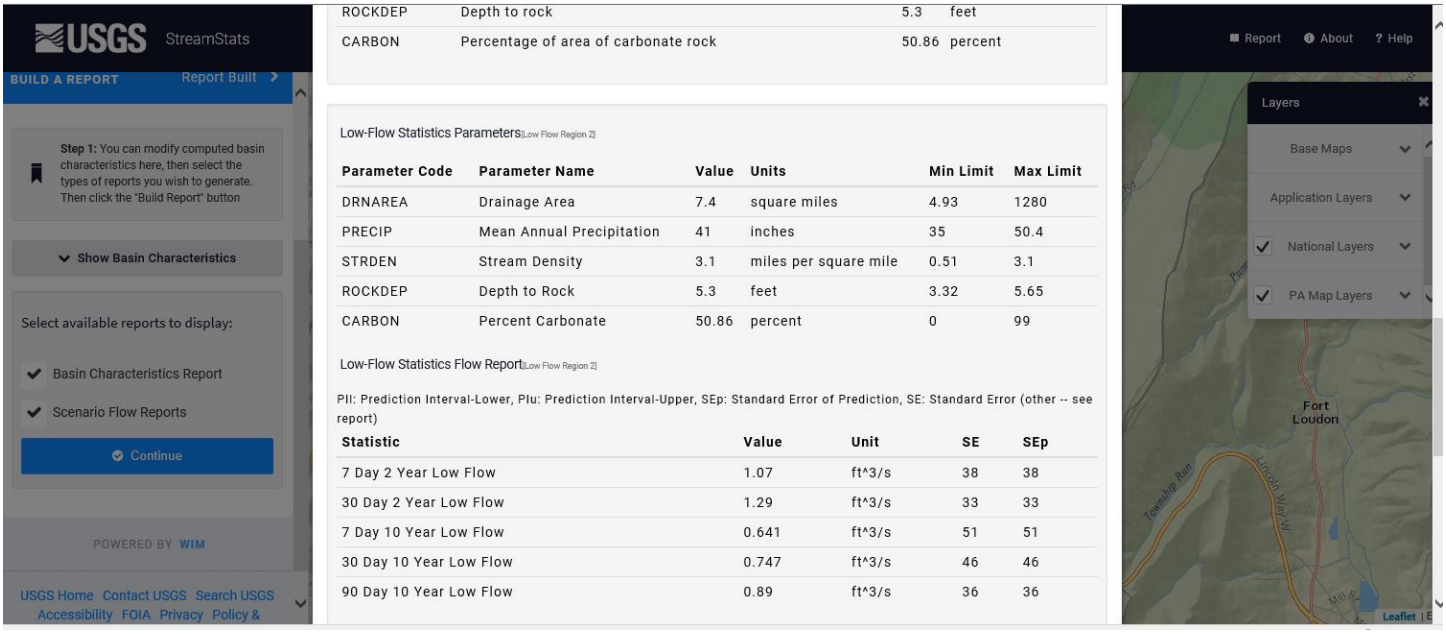
The discharge from this facility is to Big Cove Creek. This creek is impaired due to nutrients and siltation approximately 0.4 miles downstream from the discharge point, after the confluence with tributary 60577 to Big Cove Creek. The previous permit engineer mentioned that the permittee is aware about the future TMDL and was planning a design for phosphorous removal that can be expanded to meet more stringent limits in future based on the outcome of the TMDL.

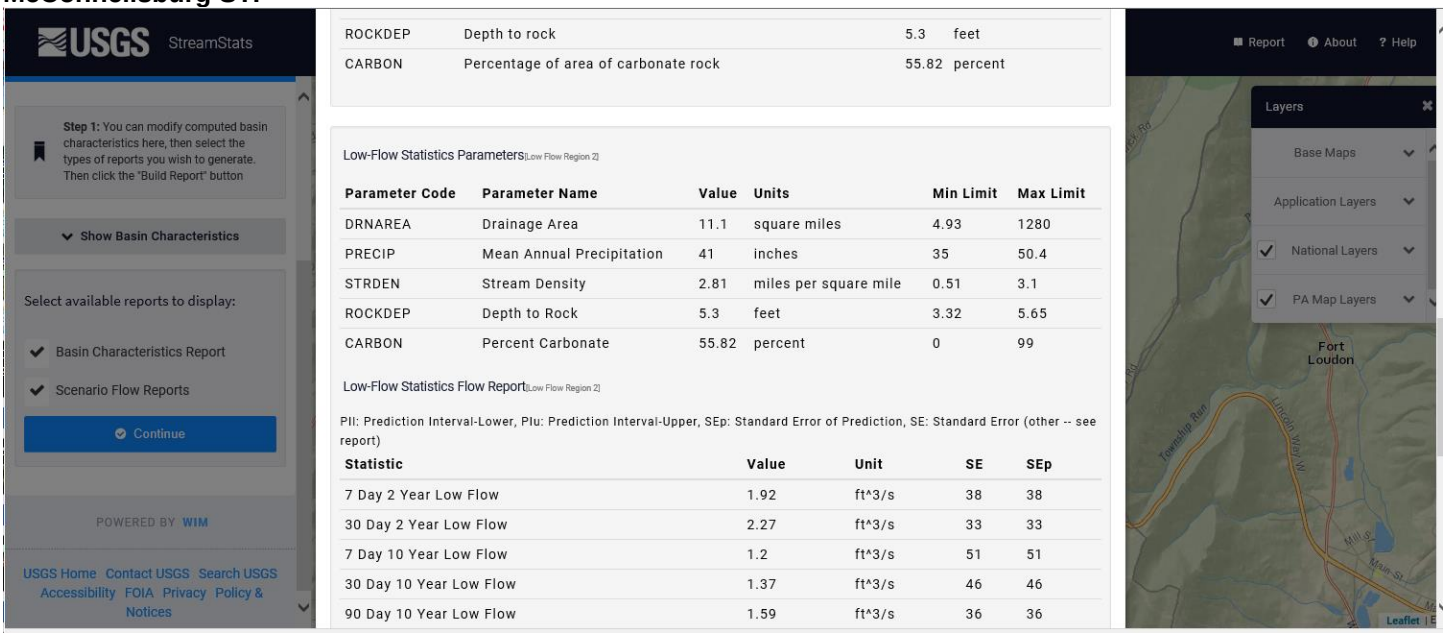
WQM 7.0 / PENTOXSD Data:

The following two nodes were used in modeling:

Node 1: Outfall 001 on Big Cove Creek (60482)
Elevation: 848.58 ft (USGS National Map Viewer)
Drainage Area: 7.4 mi.^{2} (USGS PA StreamStats)
River Mile Index: 15.13 (PA DEP eMapPA)
Low Flow Yield: 0.038 cfs/mi.^{2}
Discharge Flow: 0.6 MGD

Node 2: At the confluence with Tributary 60674 to Big Cove Creek
Elevation: 815.2 ft (USGS National Map Viewer)
Drainage Area: 11.1 mi.^{2} (USGS PA StreamStats)
River Mile Index: 13.645 (PA DEP eMapPA)
Low Flow Yield: 0.038 cfs/mi.^{2}
Discharge Flow: 0.0 MGD





ROCKDEP	Depth to rock	5.3	feet
CARBON	Percentage of area of carbonate rock	55.82	percent

Low-Flow Statistics Parameters[Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	11.1	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	41	inches	35	50.4
STRDEN	Stream Density	2.81	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	5.3	feet	3.32	5.65
CARBON	Percent Carbonate	55.82	percent	0	99

Low-Flow Statistics Flow Report[Low Flow Region 2]

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SE	SEp
7 Day 2 Year Low Flow	1.92	ft^3/s	38	38
30 Day 2 Year Low Flow	2.27	ft^3/s	33	33
7 Day 10 Year Low Flow	1.2	ft^3/s	51	51
30 Day 10 Year Low Flow	1.37	ft^3/s	46	46
90 Day 10 Year Low Flow	1.59	ft^3/s	36	36

ROCKDEP	Depth to rock	4.1	feet
CARBON	Percentage of area of carbonate rock	15.99	percent

Low-Flow Statistics Parameters[Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	159	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	39	inches	35	50.4
STRDEN	Stream Density	2.71	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4.1	feet	3.32	5.65
CARBON	Percent Carbonate	15.99	percent	0	99

Low-Flow Statistics Flow Report[Low Flow Region 2]

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SE	SEp
7 Day 2 Year Low Flow	12.6	ft^3/s	38	38
30 Day 2 Year Low Flow	17	ft^3/s	33	33
7 Day 10 Year Low Flow	6.03	ft^3/s	51	51
30 Day 10 Year Low Flow	8.32	ft^3/s	46	46
90 Day 10 Year Low Flow	12.5	ft^3/s	36	36

TRC EVALUATION

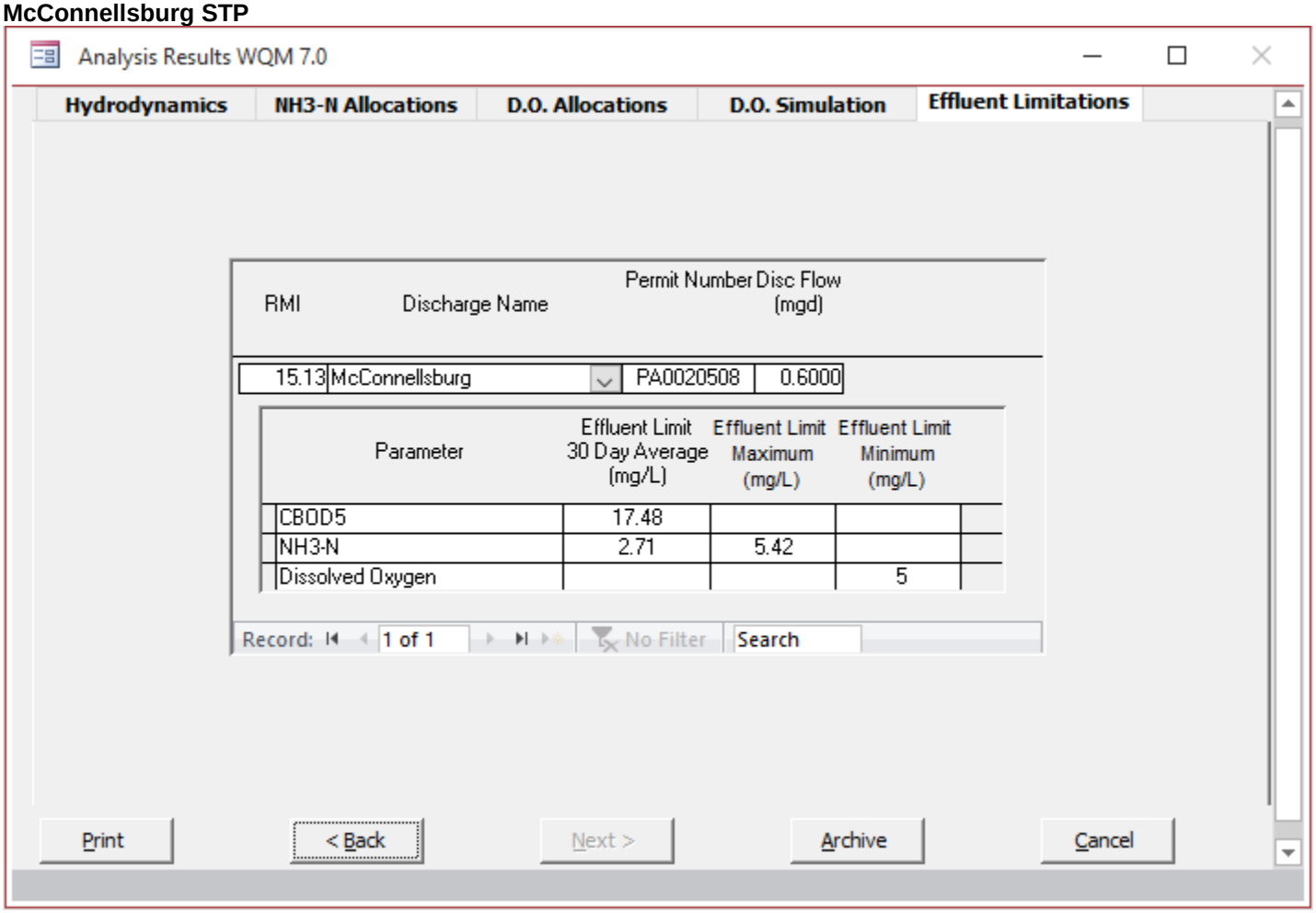
Input appropriate values in A3:A9 and D3:D9

0.3	= Q stream (cfs)	0.5	= CV Daily
0.6	= 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 = 0.122	1.3.2.iii	WLA cfc = 0.112
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.045	5.1d	LTA_cfc = 0.065

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.056	AFC
		INST MAX LIMIT (mg/l) = 0.183	

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)**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Hydrodynamics
NH3-N Allocations
D.O. Allocations
D.O. Simulation
Effluent Limitations
RMI
Discharge Name
Permit Number
Disc Flow (mgd)
15.13
McConnellsburg
PA0020508
0.6000
Parameter
Effluent Limit 30 Day Average (mg/L)
Effluent Limit Maximum (mg/L)
Effluent Limit Minimum (mg/L)
CBOD5
17.48
NH3-N
2.71
5.42
Dissolved Oxygen
5
Record: 1 of 1
No Filter
Search
Print
< Back
Next >
Archive
Cancel

Analysis Results WQM 7.0

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

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
15.130	0.600	20.000	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WD Ratio**	**Reach Velocity (fps)**
15.525	0.525	29.595	0.149
Reach C-BOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
13.88	1.000	2.08	0.700
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
5.754	6.028	Tsivoglou	5

Reach Travel Time (days): 0.609

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.061	13.06	1.99	5.44
0.122	12.29	1.91	5.30
0.183	11.56	1.83	5.27
0.244	10.88	1.75	5.32
0.305	10.24	1.68	5.41
0.365	9.63	1.61	5.54
0.426	9.06	1.54	5.68
0.487	8.53	1.48	5.83
0.548	8.02	1.42	5.99
0.609	7.55	1.36	6.14

Record: 1 of 1 | No Filter | Search

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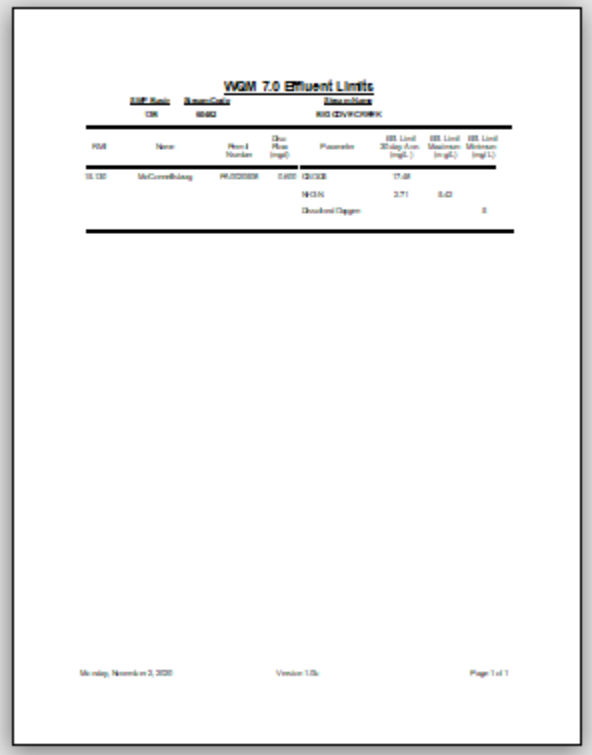
rptEffLimits



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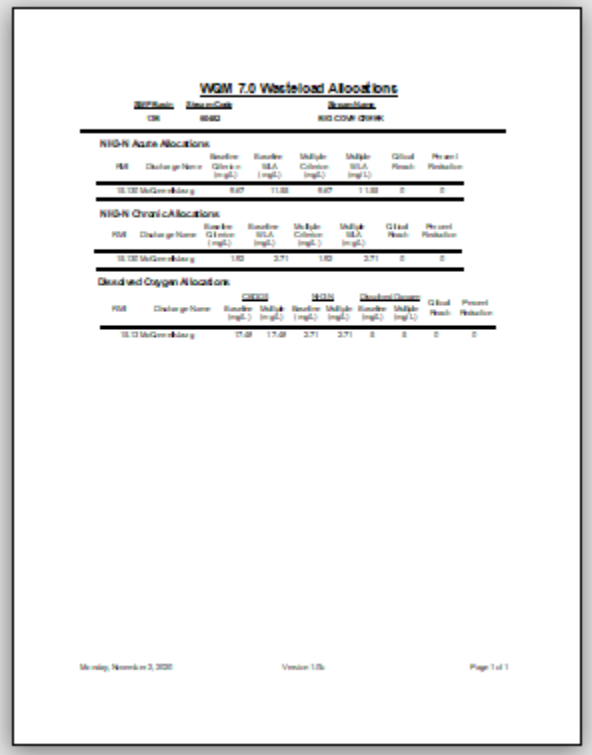

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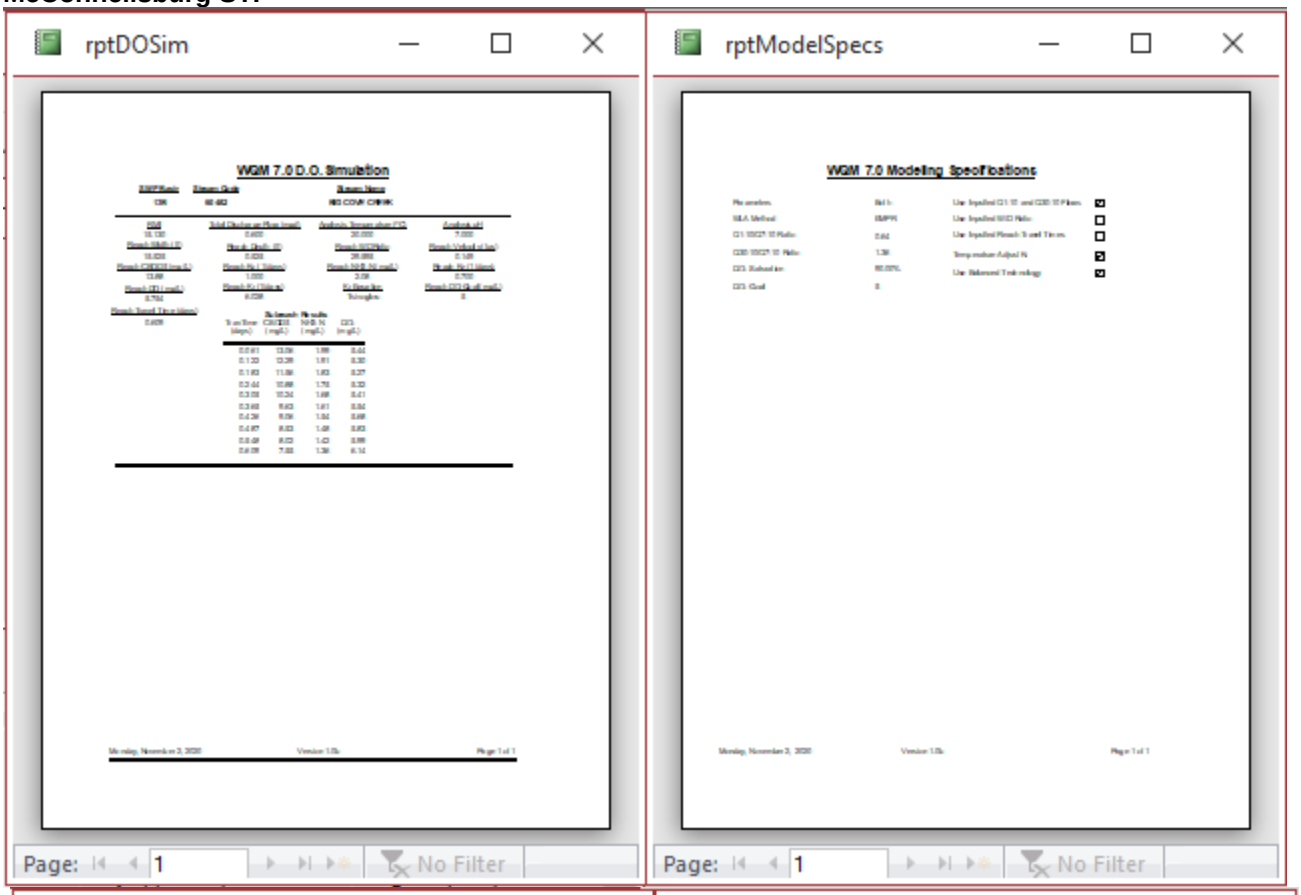
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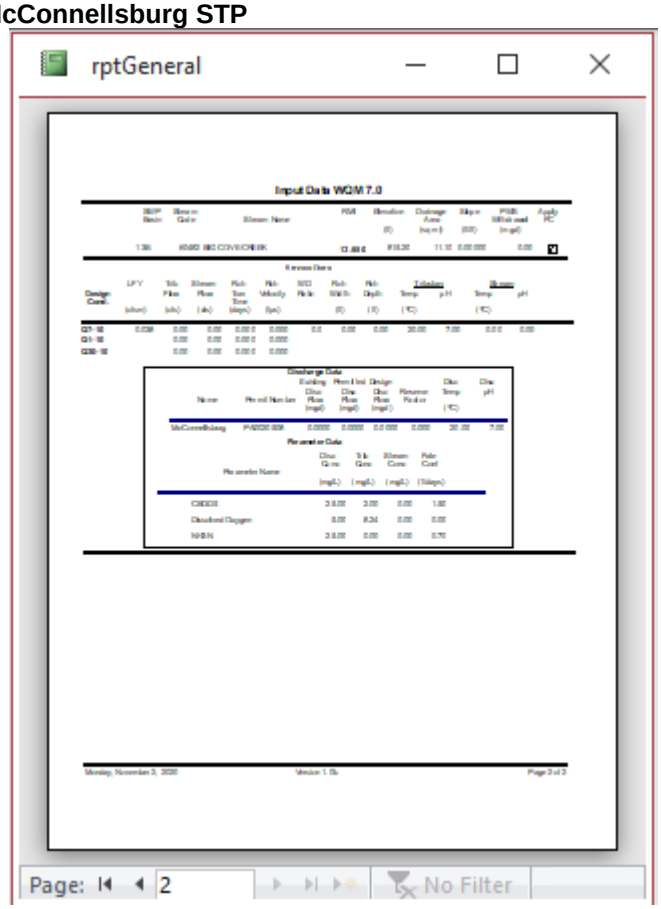
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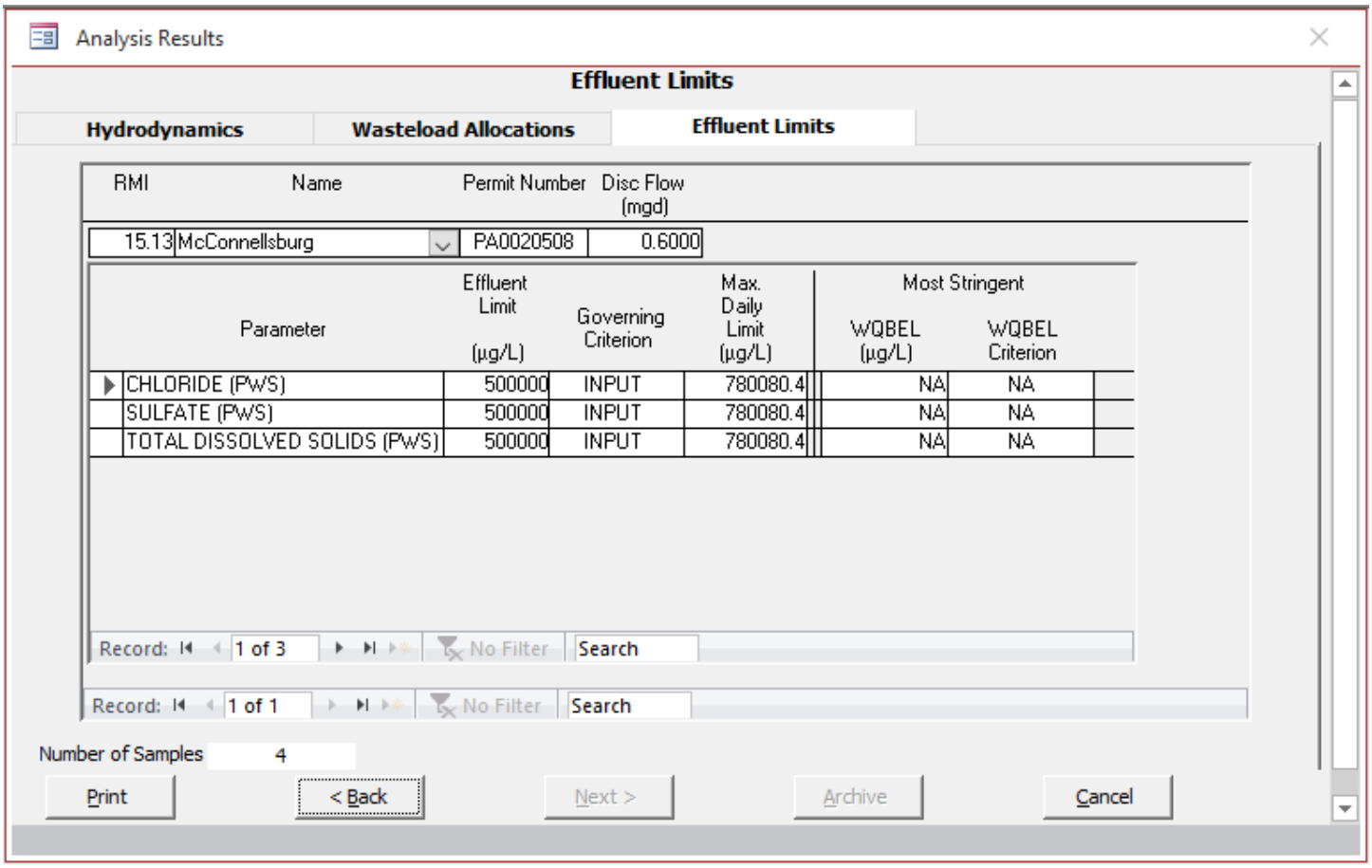
Analysis Results
Effluent Limits
Hydrodynamics
Wasteload Allocations
Effluent Limits
RMI
Name
Permit Number
Disc Flow (mgd)
15.13
McConnellsburg
PA0020508
0.6000
Parameter
Effluent Limit (µg/L)
Governing Criterion
Max. Daily Limit (µg/L)
Most Stringent
WQBEL (µg/L)
WQBEL Criterion
CHLORIDE (PWS)
500000
INPUT
780080.4
NA
NA
SULFATE (PWS)
500000
INPUT
780080.4
NA
NA
TOTAL DISSOLVED SOLIDS (PWS)
500000
INPUT
780080.4
NA
NA
Record: 1 of 3
No Filter
Search
Record: 1 of 1
No Filter
Search
Number of Samples
4
Print
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Next >
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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	Daily Maximum	Minimum	Average Monthly	Weekly Average	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	0.08	XXX	0.28	1/day	Grab
$CBOD_5$ May 1 - Oct 31	75.0	113 Wkly Avg	XXX	15.0	22.5	30.0	1/week	8-Hr Composite
$CBOD_5$ Nov 1 - Apr 30	125	200 Wkly Avg	XXX	25.0	40.0	50.0	1/week	8-Hr Composite
TSS	150	225 Wkly Avg	XXX	30.0	45.0	60.0	1/week	8-Hr Composite
BOD_5 Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/week	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	1/week	Grab
Ammonia May 1 - Oct 31	10.0	XXX	XXX	2.0	XXX	4.0	2/week	8-Hr Composite
Ammonia Nov 1 - Apr 30	30.0	XXX	XXX	6.0	XXX	12.0	2/week	8-Hr Composite
Total Phosphorus	10.0	XXX	XXX	2.0	XXX	4.0	2/week	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	Monthly Average	Maximum	Instant. Maximum		
Ammonia---N	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Kjeldahl---N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Net Total Nitrogen	Report	10,959	XXX	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	Report	1,461	XXX	XXX	XXX	XXX	1/month	Calculation

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	Daily Maximum	Minimum	Average Monthly	Weekly Average	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	0.08	XXX	0.28	1/day	Grab
$CBOD_5$ May 1 - Oct 31	75.0	113 Wkly Avg	XXX	15.0	22.5	30.0	1/week	8-Hr Composite
$CBOD_5$ Nov 1 - Apr 30	125	200 Wkly Avg	XXX	25.0	40.0	50.0	1/week	8-Hr Composite
TSS	150	225 Wkly Avg	XXX	30.0	45.0	60.0	1/week	8-Hr Composite
BOD_5 Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/week	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	1/week	Grab
Ammonia May 1 - Oct 31	10.0	XXX	XXX	2.0	XXX	4.0	2/week	8-Hr Composite
Ammonia Nov 1 - Apr 30	30.0	XXX	XXX	6.0	XXX	12.0	2/week	8-Hr Composite
Total Phosphorus	10.0	XXX	XXX	2.0	XXX	4.0	2/week	8-Hr Composite

Compliance Sampling Location:

Other Comments:

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
	Monthly	Annual	Minimum	Monthly Average	Maximum	Instant. Maximum		
Ammonia---N	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Kjeldahl---N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Net Total Nitrogen	Report	10,959	XXX	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	Report	1,461	XXX	XXX	XXX	XXX	1/month	Calculation

Compliance Sampling Location:

Other Comments:

Tools and References Used to Develop Permit	
☒	WQM for Windows Model (see Attachment)
☒	PENTOXSD for Windows Model (see Attachment)
☒	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☒	Toxics Screening Analysis 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: