pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0023604**
Facility Type	**Municipal**	APS ID	**21768**
Major / Minor	**Minor**	Authorization ID	**1262994**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**McAlisterville Area Joint Authority**	Facility Name	**Mcalisterville STP**
Applicant Address	PO Box 61	Facility Address	543 Mcmeen Road
	Mc Alisterville, PA 17049-0061		Mcalisterville, PA 17049
Applicant Contact	Cory Fronk	Facility Contact	Cory Fronk
Applicant Phone	(717) 463-3434	Facility Phone	(717) 463-3434
Client ID	24300	Site ID	251537
Ch 94 Load Status	Existing Hydraulic Overload	Municipality	Fayette Township
Connection Status	No Exceptions Allowed	County	Juniata
Date Application Received	January 28, 2019	EPA Waived?	Yes
Date Application Accepted	March 7, 2019	If No, Reason	
Purpose of Application	Renewal of existing NPDES permit		

Summary of Review

The McAlisterville Area Joint Authority has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit for the McAlisterville STP. The permit was last reissued to the McAlisterville Area Joint Authority on July 16, 2014 and became effective on August 1, 2014. The permit expired on July 31, 2019 but the terms and conditions of the permit have been administratively extended since that time.

Based on the review outlined in this fact sheet, it is recommended that the permit be drafted, and a notice of the draft permit be published in the *Pennsylvania Bulletin* for public comments for 30 days. A file review of documents associated with the discharge or permittee may be available at the PA DEP southcentral regional office (SCRO), 909 Elmerton Avenue, Harrisburg, PA 17110. To make an appointment for file reviews, contact the SCRO file review coordinator at 717.705.4700.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Approve	Deny	Signatures	Date
x		Aaron Baar / Permits Section ***Aaron Baar***	September 11, 2020
		Daniel W. Martin, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.13
Latitude	40º 37' 28.20"	Longitude	-77º 16' 42.61"
Quad Name	Mexico	Quad Code	1427
Wastewater Description:	Sewage Effluent		
Receiving Waters	Little Lost Creek (TSF)	Stream Code	12320
NHD Com ID	66204139	RMI	3.0
Drainage Area	4.67 mi^2	Yield (cfs/mi^2)	0.0959
Q_{7-10} Flow (cfs)	0.448	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	507.96	Slope (ft/ft)	
Watershed No.	12-A	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	NUTRIENTS, NUTRIENTS, SILTATION, SILTATION		
Source(s) of Impairment	CROP PRODUCTION (CROP LAND OR DRY LAND), CROP PRODUCTION (CROP LAND OR DRY LAND), CROP PRODUCTION (CROP LAND OR DRY LAND), CROP PRODUCTION (CROP LAND OR DRY LAND)		
TMDL Status	**Issued 2019**	Name	**Little Lost Creek TMDL**
Nearest Downstream Public Water Supply Intake	Newport Borough Water Authority		
PWS Waters	Juniata River	Flow at Intake (cfs)	
PWS RMI	12.6	Distance from Outfall (mi)	33.3

Drainage Area

The discharge is to Little Lost Creek at RMI 3.0. A drainage area upstream of the discharge point is determined to be 4.67 sq.mi. according to USGS PA StreamStats available at https://streamstats.usgs.gov/ss/.

Stream Flow

According to StreamStats, this watershed has a Q_{7-10} of 0.448 cfs and a drainage area of 4.67 mi^2, which results in a LFY of 0.0959 cfs/mi^2.

Little Lost Creek

Little Lost Creek is classified as a TSF waterway. Effluent limits for this discharge have been developed to ensure that existing in-stream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. The discharge is in a stream segment listed as impaired. TMDLs for sediment and phosphorus were developed for the Little Lost Creek Subwatershed to address the siltation and nutrient (phosphorus) impairments noted in the 2016 Final Pennsylvania Integrated Water Quality Monitoring and Assessment Report, including the Clean Water Act Section 303(d) List. Crop-related agriculture has been identified as the cause of these impairments. The approved TMDL does not impose WLAs on the McAListerville STP.

Public Water Supply Intake

The nearest downstream public water supply intake is the Newport Borough Water Authority intake located on the Juniata River. Considering the distance and nature of the discharge, the discharge is not expected to significantly affect the water supply.

Class A Wild Trout Streams

The receiving stream is not a Class A Wild Trout stream.

Treatment Facility Summary

Treatment Facility Name: Mcalisterville STP

WQM Permit No.	Issuance Date
3471403 12-1	2012

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Extended Aeration With Solids Removal	Gas Chlorine	0.13

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.13	260	Existing Hydraulic Overload	Combination	Landfill

The McAlisterville Area Joint Authority owns and operates the McAlisterville sanitary wastewater treatment facility located in Fayette Township, Juniata County. The facility serves only the Village of McAlisterville, all wastes are residential in nature, and all sewer systems are 100% separated. Having an annual average design flow of 0.130 MGD and a hydraulic design capacity of 0.130 MGD, this facility consists of a headworks (comminutor and grit channels), extended aeration basins x2, secondary clarification x2, a post-secondary treatment EQ basin, a chlorine contact tank, and the outfall (Outfall 001). The facility utilizes chlorine gas (disinfection), Delpac 2000 (phosphorus precipitation), and sulfur dioxide (dechlorination). Solids are treated in an onsite aerated digestor.

Compliance History	
Summary of DMRs:	A summary of past DMR data is presented on the next page.
Summary of Inspections:	Since the last NPDES permit renewal, there are records in the Department's File Room that the facility has been inspected four times. The notes from the inspections are as follows: 5/19/2014: Pat Bowen, DEP Water Quality Specialist, conducted an inspection following reports of an overflow of the aeration tank. 8/21/2014: Pat Bowen, DEP Water Quality Specialist, conducted a follow-up inspection. No violations were noted. 7/27/2015: Pat Bowen, DEP Water Quality Specialist, conducted a routine inspection. No violations were noted. 3/30/2017: Pat Bowen, DEP Water Quality Specialist, conducted a routine inspection. No violations were noted.

Other Comments: A records review revealed that there are no Clean Water open violations associated with this permitee. There is an open violation from January 2020 issued by the Safe Drinking Water Program.

Existing Limits

Outfall 001, Continued (from 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	Weekly Average	Minimum	Average Monthly	Weekly Average	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	Report	0.17	XXX	0.56	1/day	Grab
CBOD5	27	43	XXX	25	40	50	1/week	8-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS	32	49	XXX	30	45	60	1/week	8-Hr Composite
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	XXX	1/week	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/week	Grab
Ammonia Nov 1 - Apr 30	6.5	XXX	XXX	6	XXX	12	1/week	8-Hr Composite
Ammonia May 1 - Oct 31	2.1	XXX	XXX	2	XXX	4	1/week	8-Hr Composite
Total Phosphorus	2.1	XXX	XXX	2	XXX	4	1/week	8-Hr Composite
Total Nitrogen	XXX	Report Annl Avg	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite

Compliance History

DMR Data for Outfall 001 (from August 1, 2019 to July 31, 2020)

Parameter	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19
Flow (MGD) Average Monthly	0.053	0.049	0.075	0.097	0.089	0.084	0.079	0.078	0.064	0.06	0.054	0.051
Flow (MGD) Daily Maximum	0.097	0.091	0.195	0.596	0.291	0.116	0.159	0.121	0.100	0.122	0.088	0.083
pH (S.U.) Minimum	6.86	6.83	7.11	7.27	7.28	7.27	7.06	7.15	7.23	7.14	7.02	7.09
pH (S.U.) Maximum	7.33	7.3	7.73	7.64	7.66	8.18	7.65	7.53	7.67	7.74	7.58	7.59
DO (mg/L) Minimum	7.38	7.6	6.29	8.12	8.79	9.53	8.7	8.95	7.78	7.1	6.37	6.37
TRC (mg/L) Average Monthly	0.01	0.01	0.01	0.02	0.01	0.01	0.07	0.07	0.01	0.01	0.01	0.01
TRC (mg/L) Instantaneous Maximum	0.05	0.04	0.03	0.04	0.03	0.03	1.36	1.84	0.04	0.03	0.03	0.03
CBOD5 (lbs/day) Average Monthly	1.0	1.0	2.0	4.0	2.0	2.0	2.0	3.0	1.0	1.0	1.0	1.0
CBOD5 (lbs/day) Weekly Average	2.0	2.0	2.0	8.0	2.0	3.0	3.0	4.0	2.0	2.0	1.0	1.0
CBOD5 (mg/L) Average Monthly	3.0	3.0	3.0	3.0	3.0	4.0	3.0	5.0	3.0	3.0	3.0	3.0
CBOD5 (mg/L) Weekly Average	3.0	4.0	3.0	4.0	3.0	6.0	4.0	9.0	3.0	3.0	3.0	3.0
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	118	125	124	253	122	199	115	193	110	163	117	99
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	173	161	166	920	130	242	180	208	135	263	154	119
BOD5 (mg/L) Raw Sewage Influent Average Monthly	264	320	254	160	206	255	222	272	259	286	259	259
TSS (lbs/day) Average Monthly	3.0	4.0	4.0	30	5.0	5.0	7.0	5.0	4.0	4.0	3.0	2.0

TSS (lbs/day) Raw Sewage Influent Average Monthly	108	91	68	229	105	170	121	148	104	132	100	75
TSS (lbs/day) Raw Sewage Influent Daily Maximum	168	123	104	611	118	202	182	191	134	257	177	99
TSS (lbs/day) Weekly Average	4.0	8.0	5.0	81	9.0	7.0	12.0	8.0	5.0	6.0	3.0	4.0
TSS (mg/L) Average Monthly	5.0	11.0	8.0	12	8.0	8.0	10	7.0	8.0	9.0	7.0	6.0
TSS (mg/L) Raw Sewage Influent Average Monthly	241	228	156	199	175	218	228	212	247	225	211	194
TSS (mg/L) Weekly Average	7.0	16.0	10	19	11.0	10.0	15	8.0	10.0	15.0	8.0	9.0
Fecal Coliform (CFU/100 ml) Geometric Mean	48	49	24	4.0	3.0	10	2.0	12	20	17	11.0	15
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	98	72	111	13	9.0	58	4.0	216	44	52	55	50
Total Nitrogen (lbs/year) Annual Average								2529				
Total Nitrogen (mg/L) Annual Average								11.7				
Ammonia (lbs/day) Average Monthly	0.5	0.4	0.4	1.0	0.3	1.0	0.9	0.60	0.2	0.2	0.2	0.2
Ammonia (mg/L) Average Monthly	1.0	1.0	0.9	1.7	0.6	1.5	1.2	1.0	0.4	0.5	0.5	0.5
Total Phosphorus (lbs/day) Average Monthly	0.6	0.6	0.4	0.4	0.4	0.4	0.5	0.4	0.6	0.5	0.6	0.5
Total Phosphorus (mg/L) Average Monthly	1.2	1.6	0.9	0.7	0.5	0.7	0.7	0.7	1.3	1.1	1.6	1.3

Compliance History

Effluent Violations for Outfall 001, from: September 1, 2019 To: July 31, 2020

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
TRC	01/31/20	IMAX	1.36	mg/L	0.56	mg/L
TRC	01/31/20	IMAX	1.36	mg/L	0.56	mg/L
TRC	12/31/19	IMAX	1.84	mg/L	0.56	mg/L
TSS	04/30/20	Wkly Avg	81	lbs/day	49	lbs/day
TSS	04/30/20	Wkly Avg	81	lbs/day	49	lbs/day
TSS	04/30/20	Wkly Avg	81	lbs/day	49	lbs/day
Total Phosphorus	06/30/20	Avg Mo	3.0	mg/L	2.0	mg/L

Other Comments: The facility has a dechlorination system, so operational changes should correct any TRC issues at the facility. Likewise, better solids management should correct any TSS issues at the facility. Corrections to the Delpac feed rate should correct any phosphorus issues.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .13
Latitude 40º 37' 28.27" **Longitude** -77º 16' 42.65"
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)
	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
Total Suspended Solids	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: These standards apply, subject to water quality analysis and BPJ where applicable.

Water Quality-Based Limitations

CBOD5, NH3-N and Dissolved Oxygen (DO)

WQM 7.0 version 1.0b is a water quality model designed to assist DEP to determine appropriate permit requirements for CBOD5, NH3-N and DO. DEP's guidance 391-2000-007 provides the technical methods contained in WQM 7.0 for conducting wasteload allocation and for determining recommended NPDES effluent limits for point source discharges.

The model was utilized, and the model output indicated that existing limits for both CBOD5 and ammonia are lower than those specified in the model. Due to anti-backsliding provisions, however, the existing limits are deemed to be still appropriate. The existing D.O. limit of 5 mg/L is also considered still appropriate.

The monitoring frequency and sample type for CBOD5, DO and ammonia are proposed to remain unchanged.

Total Residual Chlorine

Since chlorine is used for disinfection, Total Residual Chlorine (TRC) effluent levels must be regulated in accordance with 25 Pa Code §92a.48(b). DEP's TRC_CALC worksheet was utilized to determine if the existing BAT TBEL is still appropriate. The worksheet indicated that existing limits for TRC are lower than those specified in the worksheet. Due to anti-backsliding provisions, however, the existing limits are deemed to be still appropriate.

Toxics

There are no industrial contributions to this facility. DEP's NPDES permit application for minor sewages (less than 1.0 MGD) does not require sampling for heavy metals including Total Copper, Total Lead, and Total Zinc.

Best Professional Judgment (BPJ) Limitations

Total Phosphorus & Total Nitrogen

DEP's SOP no. BPNPSM-PMT-033 recommends monitoring requirements for Total Phosphorus and Total Nitrogen for all sewage facilities. Existing monitoring/limits will be continued for Total Phosphorus and Total Nitrogen. The monitoring of NOx and TKN have been added to this permit to facilitate the connection of TN data. Also, the reporting frequency of TN is proposed to be increased in this permit to once every six months (from 1/year) in conformity with other Chesapeake Bay Phase 5 permits issued in the region.

Additional Considerations

Flow Monitoring

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

Chesapeake Bay TMDL

The Department formulated a strategy in April 2007, to comply with the EPA's and Chesapeake Bay Foundation's requirements to reduce point source loadings of Total Nitrogen (TN) and Total Phosphorus (TP) to the Bay. In the Strategy, sewage dischargers have been prioritized by Central Office based on their delivered TN loadings to the Bay. The highest priority (Phases 1, 2, and 3) dischargers received 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. Phase 4 (0.2 -0.4mgd) and Phase 5 (below 0.2mdg) facilities were required to monitor and report TN and TP during permit renewal at a monitoring frequency following Table 6-3 of DEP's Technical Guidance for Development and Specification of effluent Limitations (No. 362-0400-001).

EPA published the Chesapeake Bay Total Maximum Daily Load (TMDL) in December of 2010. Despite extensive restoration efforts during the past 25 years, the TMDL was prompted by insufficient progress and continued poor water quality in the Chesapeake Bay and its tidal tributaries.

In order to address the TMDL, Pennsylvania developed, in addition to the Bay Strategy, a Chesapeake Watershed Implementation Plan (WIP) Phase 1 in January 2011 and Phase 2 in March 2012. In accordance with the Phase 3 WIP and its supplement, re-issuing permits for significant dischargers follow the same phased approach formulated in the original Bay strategy, whilst Phase 4 and Phase 5 will be required to monitor and report TN and TP during permit renewal.

The Phase 3 WIP categorizes this facility as a phase 5 non-significant sewage facility that has a design flow less than 0.2 MGD but greater than 0.002 MGD. The WIP recommends monitoring and reporting for Total Nitrogen and Total Phosphorus throughout the permit term at a frequency no less than annual. The monitoring of NOx, TKN and TN once every six months will be written in the permit in conformity with other permits issued in the region.

Monitoring Frequency and Sample Type

The facility currently is required to collect weekly 8-hr composite effluent samples for CBOD5, TSS, fecal, TP and ammonia. This weekly monitoring frequency is consistent with Table 6-3 of DEP's technical guidance no. 362-0400-001 and will remain unchanged in this permit.

Antidegradation Requirements

All effluent limitations and monitoring requirements have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected.

Anti-backsliding Requirement

All effluent limits proposed in this fact sheet are as stringent as effluent limits specified in the existing permit renewal. This approach is in accordance with 40 CFR §122.44(l(1).

Mass Loading Limitations

All effluent mass loading limits are based on the formula: design flow x concentration limit x conversion factor of 8.34.

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 , Continued (from Permit Effective Date through Permit Expiration Date)

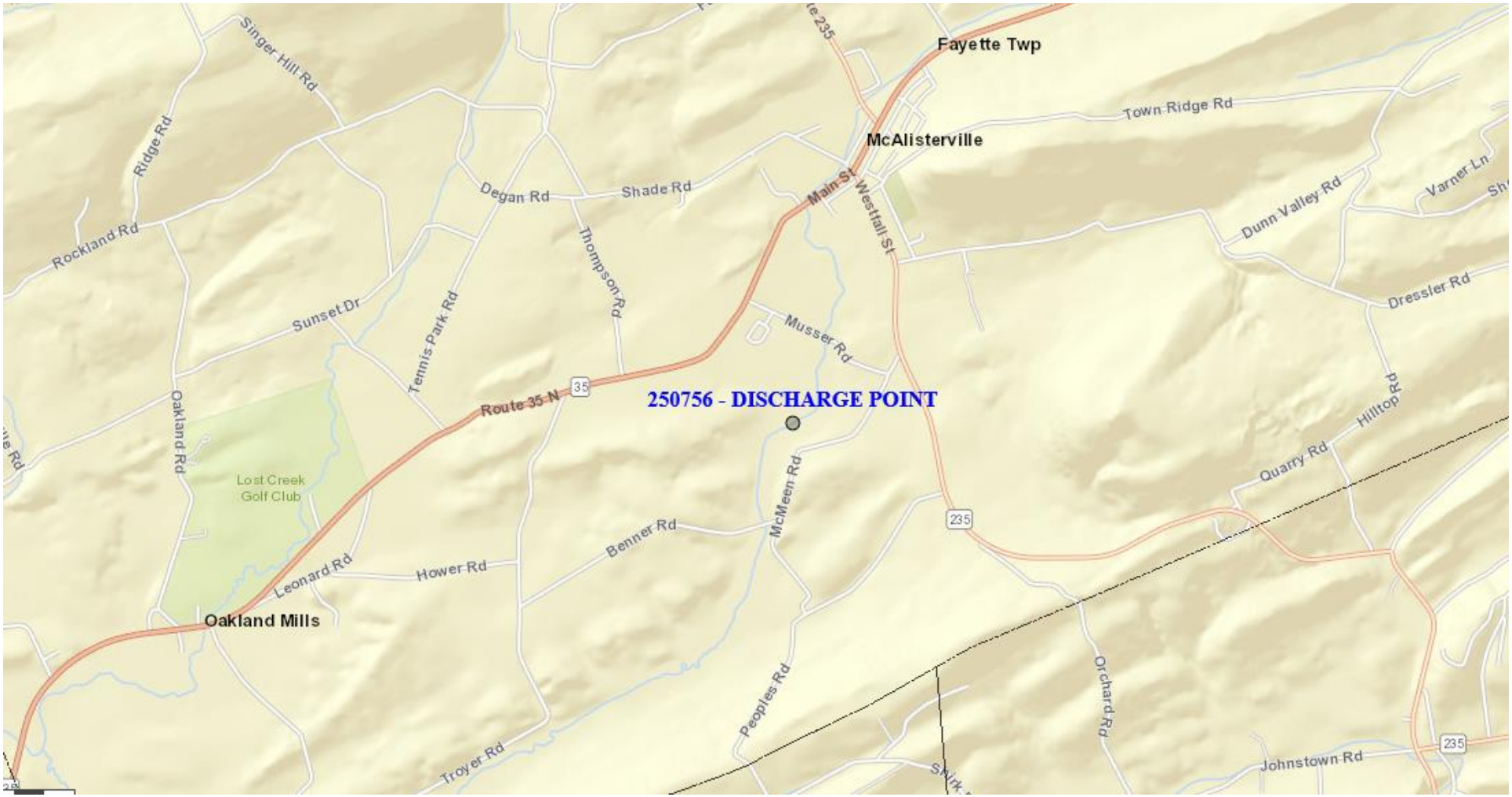
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	Report Inst Min	0.17	XXX	0.56	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	25.0	40.0	50	1/week	8-Hr Composite
Biochemical Oxygen Demand (BOD5) Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
CBOD5 (Total Load, lbs) (lbs)	27.0	43.0	XXX	XXX	XXX	XXX	1/week	Calculation
Total Suspended Solids	XXX	XXX	XXX	30.0	45.0	60	1/week	8-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Total Suspended Solids (Total Load, lbs) (lbs)	32.0	49.0	XXX	XXX	XXX	XXX	1/week	Calculation
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	XXX	1/week	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/week	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	Report SEMI AVG	XXX	XXX	1/6 months	8-Hr Composite
Nitrate-Nitrite as N (Total Load, lbs) (lbs)	XXX	Report SEMI AVG	XXX	XXX	XXX	XXX	1/6 months	Calculation
Total Nitrogen (Total Load, lbs) (lbs)	XXX	Report SEMI AVG	XXX	XXX	XXX	XXX	1/6 months	Calculation
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	6.0	XXX	12	1/week	8-Hr Composite

Outfall 001, Continued (from 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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	2.0	XXX	4	1/week	8-Hr Composite
Ammonia-Nitrogen (Total Load, lbs) (lbs) Nov 1 - Apr 30	6.5	XXX	XXX	XXX	XXX	XXX	1/week	Calculation
Ammonia-Nitrogen (Total Load, lbs) (lbs) May 1 - Oct 31	2.1	XXX	XXX	XXX	XXX	XXX	1/week	Calculation
Total Kjeldahl Nitrogen	XXX	XXX	XXX	Report SEMI AVG	XXX	XXX	1/6 months	8-Hr Composite
Total Kjeldahl Nitrogen (Total Load, lbs) (lbs)	XXX	Report SEMI AVG	XXX	XXX	XXX	XXX	1/6 months	Calculation
Total Phosphorus	XXX	XXX	XXX	2.0	XXX	4	1/week	8-Hr Composite
Total Phosphorus (Total Load, lbs) (lbs)	2.1	XXX	XXX	XXX	XXX	XXX	1/week	Calculation

Permit No. PA0023604

PA0023604 - TRC_CALC.xls | PA0023604 - rptAnalyze.pdf | PA0023604 - rptDOSim.pdf | PA0023604 - rptModelSpecs.pdf | PA0023604 - rptHydro.pdf | PA0023604 -rptEffLimits.pdf | PA0023604 - rpt_WLA.pdf | PA0023604 - 001 StreamStats.pdf | PA0023604 - Downstream Stream



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.
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