Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Amendment, Major**	**NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE**		Application No.	**PA0023604 A-1**
Facility Type	**Municipal**			APS ID	**21768**
Major / Minor	**Minor**			Authorization ID	**1474632**

Applicant and Facility Information

Applicant Name	**McAlisterville Area Joint Authority Juniata County**	Facility Name	**McAlisterville STP**
Applicant Address	PO Box 61	Facility Address	543 McMeen Road
	McAlisterville, 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	February 28, 2024	EPA Waived?	Yes
Date Application Accepted	March 15, 2024	If No, Reason	

Purpose of Application: NPDES permit major amendment to replace chlorine disinfection to UV disinfection system.

Summary of Review

CB^3 Solutions, LLC., on behalf of McAlisterville Area Joint Authority, has applied to the Pennsylvania Department of Environmental Protection (DEP) for a NPDES PA0023604 major amendment. The amendment request is to replace the chlorine monitor & requirements to UV light intensity (mW/cm^2) monitor & report. All other requirements will remain unchanged. The NPDES PA0023604 last reissuance was on December 16, 2020, became effective on January 1, 2021, and will expire on December 31, 2025.

The Water Quality Management (WQM) Permit No. 3471403 was issued on March 19, 1971; and was amended on February 22, 2001 to add of the sludge holding tank (digester) and blowers (#3471403 A-1). The WQM Part II 3471403 A-2 was issued on March 8, 2013 to upgrade to the Aeration system to convert to fine bubble aeration. The WQM Part II 3471403 A-3 was issued in 2019 to upgrade the biological process. The following attributes to remain unchanged: average design flow of 0.130 MGD and hydraulic capacity of 0.130 MGD with 260 lbs/day of BOD_5.

The WWTP before construction train is as follows:

Comminutor (1) ⇒ Grit Channel (1) ⇒ extended aeration Tank (2) ⇒ secondary clarification (2) ⇒ post-second treatment EQ tank (1) ⇒ Chlorine Contact Tank (1) ⇒ Dechlorination Feed (1) ⇒ Discharge

The WWTP after construction train is as follows:

Comminutor (1) ⇒ Grit Channel (1) ⇒ extended aeration Tank (2) ⇒ secondary clarification (2) ⇒ post-second treatment EQ tank (1) ⇒ UV Disinfection (1) ⇒ Discharge

The amendment is also proposed to abandon two filters & a Chlorine contact tank. There are no open violations associated with the permittee or the facility.

Based on the review, it is recommended that the NPDES permit be drafted and published in the Pennsylvania Bulletin for public comments for 30 days since this is a major amendment.

Approve	Deny	Signatures	Date
X		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	March 20, 2024
x		*Maria D. Bebenek for* Daniel W. Martin, P.E. / Environmental Engineer Manager	March 22, 2024

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: January 1, 2021 through Startup of New or Upgraded Facilities.

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	Report Inst Min	0.17	XXX	0.56	1/day	Grab
$CBOD_5$	27.0	43.0	XXX	25.0	40.0	50.0	1/week	8-Hr Composite
BOD_5 Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS	32.0	49.0	XXX	30.0	45.0	60.0	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	2.1	XXX	XXX	2.0	XXX	4.0	1/week	8-Hr Composite
Ammonia Nov 1 - Apr 30	6.5	XXX	XXX	6.0	XXX	12.0	1/week	8-Hr Composite
Total Phosphorus	2.1	XXX	XXX	2.0	XXX	4.0	1/week	8-Hr Composite
Nitrate-Nitrite	XXX	Report SEMI AVG	XXX	Report SEMI AVG	XXX	XXX	1/6 months	8-Hr Composite

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		
Total Nitrogen (lbs)	XXX	Report SEMI AVG	XXX	XXX	XXX	XXX	1/6 months	Calculation
TKN	XXX	Report SEMI AVG	XXX	Report SEMI AVG	XXX	XXX	1/6 months	8-Hr Composite

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Outfall 001, Effective Period: Startup of New or Upgraded Facilities through December 31, 2025.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily 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
UV Intensity (mW/cm²)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Measured
CBOD5	27.0	43.0	XXX	25.0	40.0	50.0	1/week	8-Hr Composite
BOD5 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
TSS	32.0	49.0	XXX	30.0	45.0	60.0	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	2.1	XXX	XXX	2.0	XXX	4.0	1/week	8-Hr Composite
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Total Phosphorus	2.1	XXX	XXX	2.0	XXX	4.0	1/week	8-Hr Composite
Nitrate-Nitrite	XXX	Report SEMI AVG	XXX	Report SEMI AVG	XXX	XXX	1/6 months	8-Hr Composite

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	Mass Units (lbs/day) [1]		Concentrations (mg/L)				Minimum [2] Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Total Nitrogen (lbs)	XXX	Report SEMI AVG	XXX	XXX	XXX	XXX	1/6 months	Calculation
TKN	XXX	Report SEMI AVG	XXX	Report SEMI AVG	XXX	XXX	1/6 months	8-Hr Composite