pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0043419**
Facility Type	**Municipal**	APS ID	**999058**
Major / Minor	**Minor**	Authorization ID	**1283276**

Applicant and Facility Information

Applicant Name	**Coudersport Area Municipal Authority**	Facility Name	**Coudersport Area Municipal Authority Wastewater Treatment Plant**
Applicant Address	201 S West Street	Facility Address	23 Toles Hollow Road
	Coudersport, PA 16915-1047		Coudersport, PA 16915
Applicant Contact	Beverly Morris	Facility Contact	William Carpenter
Applicant Phone	(814) 274-9776	Facility Phone	(814) 247-8811
Client ID	63768	Site ID	262290
Ch 94 Load Status	Not Overloaded	Municipality	Coudersport Borough
Connection Status	No Limitations	County	Potter
Date Application Received	August 1, 2019	EPA Waived?	Yes
Date Application Accepted	August 14, 2019	If No, Reason	
Purpose of Application	Renewal of an existing NPDES permit for the discharge of treated sewage.		

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		Derek S. Garner Derek S. Garner / Project Manager	03/02/2020
x		Nicholas W. Hartranft Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	03/02/2020

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.95
Latitude	41º 45' 41.75"	Longitude	-78º 2' 31.28"
Quad Name	Coudersport	Quad Code	0421
Wastewater Description:	Sewage Effluent		

Receiving Waters	Allegheny River (CWF)	Stream Code	42122
NHD Com ID	112371315	RMI	308.56
Drainage Area	88.2	Yield (cfs/mi^2)	0.058
Q_{7-10} Flow (cfs)	5.12	Q_{7-10} Basis	Streamgage No. 03007800
Elevation (ft)	1618	Slope (ft/ft)	n/a
Watershed No.	16-C	Chapter 93 Class.	CWF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	n/a		
Source(s) of Impairment	n/a		
TMDL Status	n/a	Name	n/a

Nearest Downstream Public Water Supply Intake	PA-NY Border		
PWS Waters	Allegheny River	Flow at Intake (cfs)	n/a
PWS RMI	n/a	Distance from Outfall (mi)	44

Treatment Facility Summary

Construction and continued operation of the Coudersport Area Municipal Authority Wastewater Treatment Plant is covered under WQM Permit No. 5399402, issued April 20, 2000. The treatment plant is permitted for an annual average flow of 0.95 MGD, hydraulic design capacity of 2.5 MGD, and an organic design capacity of 2,650 lbs/day.

Treatment at the facility consists of one grit chamber and bar screen for influent pretreatment, a three-channel oxidation ditch for primary treatment, and two clarifiers offering secondary treatment. Disinfection of the treated wastewater is provided by a UV system. After disinfection, the wastewater enters a post-aeration tank prior to discharge via Outfall 001 to the Alleghany River.

Two aerobic sludge digesters are used for digestion. One sludge storage tank is used for gravity thickening, and a belt filter system is used for sludge dewatering. Sludge is dried on an asphalt drying bed before being hauled to the McKean County Landfill.

Soda ash is used for pH adjustment and a cationic polymer is added for enhanced sludge processing.

Within the existing permit term, 3,000 gallons of sludge was received from the George Deer Mobile Home Park.

Compliance History

The facility was last inspected by DEP on September 25, 2019. No violations were noted at the time of inspection.

A query of eDMR sample results did not yield any effluent violations during the existing permit term.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.95
Latitude 41º 45' 41.40" **Longitude** -78º 2' 31.10"
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)

Water Quality-Based Limitations

DEP models in-stream conditions to determine if WQBELs are appropriate. Models were created using WQM 7.0 v1.0b for CBOD5, ammonia-N (NH3-N), and dissolved oxygen and PENTOXSD v2.0d for toxics.

The water quality model WQM 7.0 v1.0b is used to determine the WQBELs for CBOD5, ammonia-N, and dissolved oxygen based on a multiple discharge analysis, if applicable. The model assumes complete and instantaneous mixing with the receiving surface water. The reach chosen to model the in-stream characteristics is appropriate as a recovery in dissolved oxygen levels is demonstrated. The modeling output is as follows:

Parameter	Discharge Conc. (mg/l)	Effluent Limitations (mg/l)		
		30 Day Average	Maximum	Minimum
CBOD5	25	25	--	--
NH3-N	8	8	16	--
Dissolved Oxygen	5	--	--	5

The input discharge concentrations are the current average monthly effluent limitations established in the existing permit. Based on the model output, the existing effluent limitations for CBOD5 and ammonia-N are protective of the receiving surface water and should remain in the permit.

Unlike WQM 7.0 v1.0b, PENTOXSD 2.0d is a single discharge model that does not assume instantaneous mixing with the receiving surface water upon discharge, but instead assigns a partial mixing factor based upon surface water and discharge characteristics. From the reported sample results, only total copper was identified as a candidate for PENTOXSD modeling. The model results indicate a WQBEL of 23.8 ug/l for total copper is appropriate; however, the facility has been completing quarterly testing for total copper and has not had a result approach the WQBEL (generally at or below 0.01 ug/l). Accordingly, DEP does not recommend an effluent limit for total copper and recommends removing the existing monitoring requirement since there does not appear to be reasonable potential to exceed the WQBEL.

Best Professional Judgment (BPJ) Limitations

DEP has proposed to maintain the existing minimum dissolved oxygen limit of 5 mg/l and monitoring requirements to ensure proper facility operation and better characterize the wastewater.

Minimum UV transmittance reporting requirements are proposed to remain in the permit to ensure adequate disinfection is taking place.

Annual nutrient reporting for total nitrogen and total phosphorus has been proposed to better characterize the wastewater.

Additional Considerations

Influent sampling for BOD5 and TSS is proposed to remain in the permit for Chapter 94 reporting purposes.

Anti-Backsliding

Per anti-backsliding regulations at 40 CFR § 122.44(l)(2)(i)(B)(1) monitoring for total copper has been removed based on new data that was not available at the time of permit issuance.

Existing Effluent Limitations and Monitoring Requirements

The existing effluent limits and monitoring requirements are as follows:

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum 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	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
CBOD5	195	315	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
Total Suspended Solids	235	355	XXX	30	45	60	1/week	8-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	Report Daily Max	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
UV Transmittance (%)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Metered
Ammonia-Nitrogen May 1 - Oct 31	60	95	XXX	8.0	12	16	1/week	8-Hr Composite
Ammonia-Nitrogen Nov 1 - Apr 30	190	285	XXX	24	36	48	1/week	8-Hr Composite
Total Copper	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 001

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)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Daily Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD5	195	315	XXX	25.0	40.0	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	235	355	XXX	30.0	45.0	60	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
UV Transmittance (%)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Metered
Total Nitrogen	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Ammonia Nov 1 - Apr 30	190	285	XXX	24.0	36.0	48	1/week	8-Hr Composite
Ammonia May 1 - Oct 31	60	95	XXX	8.0	12.0	16	1/week	8-Hr Composite
Total Phosphorus	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite

Compliance Sampling Location: Outfall 001

Attachments