pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0043893**
Facility Type	**Municipal**	APS ID	**1054526**
Major / Minor	**Minor**	Authorization ID	**1381209**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Western Clinton County Municipal Authority**	Facility Name	**Western Clinton County Municipal Authority STP**
Applicant Address	PO Box 363 Renovo, PA 17764-0363	Facility Address	1700 Erie Avenue Renovo, PA 17764
Applicant Contact	Debbie Casper	Facility Contact	Kyle Stewart
Applicant Phone	(570) 923-0577	Facility Phone	570-923-2917
Client ID	65137	Site ID	255882
Ch 94 Load Status	Not Overloaded	Municipality	Renovo Borough
Connection Status	No Limitations	County	Clinton
Date Application Received	January 10, 2022	EPA Waived?	No
Date Application Accepted	January 12, 2022	If No, Reason	Significant CB Discharge

Purpose of Application: Renewal of existing NPDES permit.

Summary of Review

The above applicant has submitted an NPDES renewal application for their existing discharge to the West Branch Susquehanna River. The discharge is from an existing 0.9 MGD (1020 lbs day BOD organic capacity) sewage treatment plant that serves Renovo Borough, South Renovo Borough, and Chapman Township. The facility does not serve any significant industrial users. The facility does accept septage in the headworks. The expected annual average septage received over the next 5 years is approximately 125,000 gallons per year.

The 0.9 MGD treatment plant consists of a raw wet well, comminutor/bar rack, two 425,000-gallon oxidation ditches, three clarifiers, a chlorinator, two chlorine contact tanks, and an outfall. Sludge is treated using sludge drying beds. Dewatered sludge is taken to a landfill.

Sludge use and disposal description and location(s): Wayne Township Landfill in Clinton County, PA.

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		*Chad A. Fabian* Chad A. Fabian / Project Manager	December 8, 2022
X		*Nicholas W. Hartranft, P.E.* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	December 12, 2022

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.9
Latitude	41º 19' 43.65"	Longitude	-77º 44' 16.52"
Wastewater Description:	Sewage Effluent		
Receiving Waters	West Branch Susquehanna River	Stream Code	18668
NHD Com ID	61115097	RMI	96.6
Drainage Area	2980	Yield (cfs/mi^2)	0.062
Q_{7-10} Flow (cfs)	186	Q_{7-10} Basis	USGS Streamstats
Elevation (ft)	1720	Slope (ft/ft)	0.00631
Watershed No.	9-B	Chapter 93 Class.	WWF
Existing Use	WWF	Existing Use Qualifier	n/a
Exceptions to Use	None	Exceptions to Criteria	none
Assessment Status	Impaired		
Cause(s) of Impairment	Metals		
Source(s) of Impairment	Abandoned Mine Drainage		
TMDL Status	Final	Name	West Branch Susquehanna
Nearest Downstream Public Water Supply Intake	85 miles downstream near Milton, PA on West Br. Susquehanna River		

Changes Since Last Permit Issuance: None

Compliance History	
Summary of DMRs:	The facility utilizes the Department's eDMR system. A review of the previous 12 months of monitoring reports show that no effluent violations have occurred.
Summary of Inspections:	The latest onsite inspection performed by the Department occurred on 9/12/2022. No effluent violations were noted during the inspection.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.9
Latitude 41º 19' 43.00" **Longitude** -77º 44' 23.00"
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)

Water Quality-Based Limitations

The Department's WQM 7.0 model allows the Department to evaluate point source discharges of dissolved oxygen (DO), carbonaceous BOD (CBOD5), and ammonia-nitrogen (NH3-N) into free-flowing streams and rivers. To accomplish this, the model simulates two basic processes: the mixing and degradation of NH3-N in the stream and the mixing and consumption of DO in the stream due to the degradation of CBOD5 and NH3-N. WQM 7.0 modeling was previously performed (see attached) for the discharge. The results of this modeling show that the existing limitations are protective of water quality standards. Per the Department's SOP for reissuance of NPDES permits, since no changes to the characteristics of the wastewater or receiving stream have occurred, additional modeling was not performed.

The applicant is not required to test for toxics since the facility has a flow less than 1.0 MGD and does not have any industrial users within the system. Therefore, a toxics evaluation was not required.

Best Professional Judgment (BPJ) Limitations

Since the receiving waters is listed as impaired for metals (by acid mine drainage) the existing permit required monitoring for total aluminum, total manganese, and total iron to characterize the facilities contribution to the impairment. A summary of the results from the previous 5 years are below:

Year	Total Aluminum (mg/l)	Total Iron (mg/l)	Total Manganese (mg/l)
2017	< 0.10	0.05	<0.01
2018	<0.05	<0.04	<0.02
2019	<0.10	<0.20	<0.02
2020	<0.10	<0.20	<0.02
2021	<0.10	0.216	<0.02

The above results show that the discharge does not significantly contribute to the impairment. The Department recommends eliminating monitoring for the above metals.

Anti-Backsliding

This draft permit does not propose to reduce any existing effluent limitation.

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	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 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	Report Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	188	300	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	225	338	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
E. Coli (No./100 ml)	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/quarter	Grab
Nitrate-Nitrite	XXX	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Nitrate-Nitrite (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation

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		
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	Calculation
Total Nitrogen (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Nitrogen (lbs) Effluent Net	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Ammonia	XXX	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Ammonia (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
TKN	XXX	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
TKN (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Total Phosphorus (lbs) Effluent Net	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation

Compliance Sampling Location: 001

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, to comply with Pennsylvania's Chesapeake Bay Tributary Strategy.

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	Monthly	Monthly Average	Maximum	Instant. Maximum		
Total Nitrogen (lbs) Effluent Net	XXX	16438 Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Nitrogen (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Ammonia (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus (lbs) Effluent Net	XXX	2192 Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation

Compliance Sampling Location: 001

Other Comments:

All the above effluent limitations and monitoring frequencies are the same as the existing permit. The Department recommends drafting the permit as described herein.