

# Northcentral Regional Office CLEAN WATER PROGRAM

Application Type

Facility Type

Major / Minor

Minor

# NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0114472

APS ID 1044504

Authorization ID 1363659

#### **Applicant and Facility Information**

Applicant Name	Cherry Township Board of Supervisors	Facility Name	Cherry Township Wastewater Treatment Plant
Applicant Address	11961 Route 87	Facility Address	Pennsylvania Avenue
	Dushore, PA 18614-7440		Mildred, PA 18614
Applicant Contact	Diane Fitzgerald	Facility Contact	Diane Fitzgerald
Applicant Phone	(570) 928-9228	Facility Phone	(570) 928-9228
Client ID	53072	Site ID	251252
Ch 94 Load Status	Not Overloaded	Municipality	Cherry Township
Connection Status	No Limitations	County	Sullivan
Date Application Rece	ived July 29, 2021	EPA Waived?	Yes
Date Application Accepted		If No, Reason	
Purpose of Application Renewal of an existing NPDES pe		nit 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
Х		Derek S. Garner	
		Derek S. Garner / Project Manager	May 2, 2022
х		Nícholas W. Hartranft	
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	May 3, 2022

	Discharge, Receiving Water	ers and Water Supply Informat	tion
	28' 26.68" aporte ription: Sewage Effluent	Design Flow (MGD) Longitude Quad Code	0.07 -76° 22' 54.88" 0734
Receiving Waters NHD Com ID	Birch Creek 66906907	Stream Code RMI	20365 4.18
Drainage Area Q <sub>7-10</sub> Flow (cfs)	7.46 0.38	Yield (cfs/mi²) Q <sub>7-10</sub> Basis	0.05 Streamgage No. 01552500
Elevation (ft) Watershed No.	1780 10-B	Slope (ft/ft) Chapter 93 Class.	0.01 CWF
Existing Use	Exceptional Value ("EV") (1)	Existing Use Qualifier	RBP - Antidegradation
Exceptions to Use Assessment Statu	-	Exceptions to Criteria	n/a
Nearest Downstre	am Public Water Supply Intake	PA American Water Company	
PWS Waters	West Branch Susquehanna River	_ Flow at Intake (cfs)	679.73
PWS RMI	10.66	Distance from Outfall (mi)	79

(1) DEP has evaluated information indicating that the existing use of the receiving waters is different than the designated use under 25 Pa. Code § 93.9. In developing the draft NPDES permit, DEP is proposing to protect the existing use of the receiving waters. Following DEP's notice of the receipt of the application and the draft permit in the Pennsylvania Bulletin, DEP will accept written comments during the public comment period regarding DEP's tentative determination to protect the existing use. DEP will make a final determination on existing use protection for the receiving waters as part of the final permit action.

#### **Treatment Facility Summary**

Operation of the CT WWTP ("CT WWTP") is covered under WQM Permit No. 5791401, issued July 22, 1992. The headworks consists of a comminutor and a backup manual bar screen. After screening the wastewater enters a splitter box where the flow is diverted into one of two 31,890-gallon sequencing batch reactor (SBR) units. After treatment in the SBR units the wastewater is disinfected in a 5,830-gallon chlorine contact tank using gas chlorine. A tablet dechlorinator was installed in October 2013 to comply with total residual chlorine limits established in the facility's NPDES permit. After disinfection, the treated effluent is discharged via Outfall 001 to Birch Creek.

Sludge is aerobically digested in duplicate 8,800-gallon tanks. The sludge is then pumped to a 672 sq. ft. covered drying bed.

	Degree of			Avg Annual
Waste Type	Treatment	Process Type	Disinfection	Flow (MGD)
		Sequencing Batch		
Sewage	Secondary	Reactor	Gas Chlorine	0.07
Hydraulic Capacity	Organic Capacity			Biosolids
(MGD)	(lbs/day)	Load Status	Biosolids Treatment	Use/Disposal
0.07	117	Not Overloaded	Dewatering	Landfill

#### **Compliance History**

The CT WWTP was most recently inspected by DEP on February 1, 2022. All required treatment units were operational and online at the time of the inspection.

The following violations occurred, and have been resolved, during the permit's existing term:

Violation ID	Violation Date	Violation Type	Violation Type Description	Resolved Date	Inspection ID
943920	2/1/2022	92A.41(A)12B	NPDES - Failure to submit monitoring report(s) or properly complete monitoring reports	2/1/2022	3315888
944787	12/20/2021	302.202	Operator Certification - Failure to submit annual system fee	1/4/2022	3319858

There are no open violations associated with the permittee.

Development of Effluent Limitations							
Outfall No.	001	Design Flow (MGD)	0.07				
Latitude	41° 28' 26.90"	Longitude	-76º 22' 54.90"				
Wastewater D	Description: Sewage Effluent	_					

#### **Technology-Based Limitations ("TBELs")**

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 <sub>5</sub>	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
CBOD5	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)
pН	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 (1)	0.05	Average Monthly	-	92a.48(b)(2)

<sup>(1)</sup> Per 25 PA Code § 92a.48(b)(3) the CT WWTP is required to dechlorinate its effluent due to the Exceptional Value existing use classification of Birch Creek. A total residual chlorine (TRC) instantaneous maximum limit of 0.05 mg/L was established in previous renewals to demonstrate dechlorination is taking place. It is recommended that the existing limit remain.

#### Water Quality-Based Limitations ("WQBELs")

WQBELs were previously evaluated during the permit's most recent renewal in 2016. The evaluation determined that the existing WQBELs for ammonia-n should remain in the permit, and that WQBELs for CBOD5, dissolved oxygen, TRC were not necessary. There does not appear to be any significant change to the discharge or the receiving water that would cause a change to model input data. Accordingly, DEP has chosen not to remodel the discharge and recommends the existing WQBELs remain.

### **Best Professional Judgment ("BPJ") Limitations**

DEP recommends that existing monitoring requirements for dissolved oxygen remain in the permit to help characterize the effluent. Additionally, BOD5 and TSS influent monitoring should remain in the permit to help characterize the wastewater and with Chapter 94 reporting requirements.

An annual reporting requirement for E. Coli is proposed per the 2017 Triennial Review of Water Quality Standards, published in the PA Bulletin on July 11, 2020.

#### **Chesapeake Bay Requirements**

The CT WWTP is classified as a Phase 5 facility (average annual design flow > 0.002 MGD and < 0.2 MGD) per the Supplement to Phase III of Pennsylvania's Watershed Implementation Plan (WIP). The WIP requires all Phase 5 facilities to monitor for Total Nitrogen (TN) and Total Phosphorus (TP) at a frequency of no less than annually unless the facility has previously completed at least two years of nutrient monitoring. The facility previously completed nutrient monitoring in June 2008. Over the course of sampling the facility averaged approximately 5 lbs/day of TN and 0.5 lbs/day of TP.

# **Anti-Backsliding**

No limits or monitoring requirements are proposed to be made less stringent. Anti-backsliding requirements do not impact the permit.

# **Existing Effluent Limitations and Monitoring Requirements**

The existing effluent limitations and monitoring requirements are as follows:

# Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

	Effluent Limitations						Monitoring Requirements	
Parameter	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum	Required
r ai ailletei	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/day	Grab
Dissolved Oxygen	XXX	XXX	Report	XXX	XXX	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	xxx	XXX	Report	XXX	0.05	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	14	23	XXX	25.0	40.0	50	1/week	8-Hr Composite
Biochemical Oxygen Demand (BOD5) Raw Sewage Influent	Report	Report Daily Max	xxx	Report	XXX	xxx	2/month	Grab
Total Suspended Solids Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	Grab
Total Suspended Solids	17	26	XXX	30.0	45.0	60	1/week	8-Hr Composite
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	Report	Report	XXX	Report	Report	XXX	1/week	8-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	6.0	9.0	XXX	11.0	16.0	22	1/week	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.

	Effluent Limitations						Monitoring Re	quirements
Parameter	Mass Unit	ts (lbs/day)		Concentrations (mg/L)			Minimum	Required
raiailietei	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum	Measurement Frequency	Sample Type
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	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	Report	XXX	0.05	1/day	Grab
CBOD5	14	23	XXX	25.0	40.0	50	1/week	8-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	8-Hr Composite
TSS	17	26	XXX	30.0	45.0	60	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	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	XXX	XXX	Report	1/year	Grab
Ammonia Nov 1 - Apr 30	Report	Report	XXX	Report	Report	XXX	1/week	8-Hr Composite
Ammonia May 1 - Oct 31	6.0	9.0	XXX	11.0	16.0	22	1/week	8-Hr Composite

Compliance Sampling Location: Outfall 001