

Application Type Renewal  
 Facility Type Non-Municipal  
 Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0031852  
 APS ID 1019511  
 Authorization ID 1319963

**Applicant and Facility Information**

Applicant Name	<u>Central Columbia School District</u>	Facility Name	<u>Central Columbia School District High Mid</u>
Applicant Address	<u>4777 Old Berwick Road</u> <u>Bloomsburg, PA 17815-3515</u>	Facility Address	<u>4777 Old Berwick Road</u> <u>Bloomsburg, PA 17815-3515</u>
Applicant Contact	<u>Dwayne Prosceno</u>	Facility Contact	<u>Dwayne Prosceno</u>
Applicant Phone	<u>(470) 204-6706</u>	Facility Phone	<u>(570) 204-6706</u>
Client ID	<u>6741</u>	Site ID	<u>257175</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>South Centre Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Columbia</u>
Date Application Received	<u>July 9, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>July 9, 2020</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of Existing NPDES permit</u>		

**Summary of Review**

The above permittee has submitted an NPDES renewal application for their existing discharge from their sewage treatment plant that serves Central Columbia School District in South Centre Township, Columbia County. Based on the following review, it is recommended a permit be drafted in accordance with the public participation as outlined below. Unless otherwise noted, all applicable Department Standard Operating Procedures (SOPs) have been following during the review of the respective application.

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		<i>Chad A. Fabian</i> Chad A. Fabian / Project Manager	January 7, 2021
X		<i>Nicholas W. Hartranft, P.E.</i> Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	January 7, 2021

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.028
Latitude	41° 1' 29.04"	Longitude	-76° 22' 12.39"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Susquehanna River (CWF)	Stream Code	28075
NHD Com ID	65639971	RMI	0.59
Drainage Area	1.05	Yield (cfs/mi <sup>2</sup> )	0.205
Q <sub>7-10</sub> Flow (cfs)	0.22	Q <sub>7-10</sub> Basis	USGS Stream Gage 01442500
Elevation (ft)	500	Slope (ft/ft)	n/a
Watershed No.	5-D	Chapter 93 Class.	CWF
Existing Use	CWF	Existing Use Qualifier	n/a
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Attaining Use(s)		
Near Danville, PA on the Susquehanna River			
Nearest Downstream Public Water Supply Intake approximately 20 miles downstream of the discharge			

Changes Since Last Permit Issuance: None

**Treatment Facility Summary**

**Treatment Facility Name:** Central Columbia School District Wastewater Treatment Plant

WQM Permit No.	Issuance Date
1990407	3/23/1990

The facility consists of one comminutor, one manual bar screen, one equalization tank, one distribution box, four Cromaglass SBRs, four erosion chlorinators, four chlorine contact tanks, and one sludge holding tank.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	SBR	Gas Chlorine	0.028
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.028	Unknown	Not Overloaded	Holding Tank	Other WWTP

**Compliance History**

<b>Summary of DMRs:</b>	The facility utilizes the Department's eDMR system. The facility has had one minor exceedance of TSS in the past 12 months, as indicated below in the compliance history section. Otherwise, a review of the eDMRs show compliance with the existing permit effluent limitations.
<b>Summary of Inspections:</b>	A telephone administrative inspection occurred on 4/3/2020. No violations were noted.

**Compliance History**

**DMR Data for Outfall 001 (from December 1, 2019 to November 30, 2020)**

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
Flow (MGD) Average Monthly	0.0025	0.0055	0.0059	0.0016	0.0032	0.0032	0.0075	0.0022	0.0049	0.0088	0.0082	0.0055
Flow (MGD) Daily Maximum	0.0080	0.0098	0.0130	0.0150	0.0199	0.0111	0.0528	0.0123	0.0128	0.0156	0.0130	0.0134
pH (S.U.) Minimum	6.3	6.6	6.0	6.1	6.0	6.0	6.4	6.3	6.4	6.1	6.6	6.7
pH (S.U.) Maximum	7.4	7.3	7.2	7.1	7.1	7.0	7.0	7.0	7.2	7.5	7.4	7.4
DO (mg/L) Minimum	0.55	0.61	0.58	1.96	2.7	2.7	2.1	1.0	0.1	0.9	0.89	1.3
TRC (mg/L) Average Monthly	0.4	0.3	0.1	0.2	0.4	0.2	0.2	0.4	0.1	0.3	0.3	0.3
TRC (mg/L) Instantaneous Maximum	0.8	0.6	0.4	0.7	0.6	0.5	0.5	0.8	0.3	1.0	0.9	0.6
CBOD5 (mg/L) Average Monthly	7	3	3	< 2	< 2	< 3	5	4	19	3	3	4
TSS (mg/L) Average Monthly	20	< 4	12	< 15	28	13	20	8	34	4	10	6
Fecal Coliform (CFU/100 ml) Geometric Mean	< 3	< 1	< 3	< 1	< 1	3	< 1	< 3	387	< 15	13	47
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	10	< 1	10	< 1	< 1	6	< 1	8	5000	224	40	281
Ammonia (mg/L) Average Monthly	6	2.5	1.2	< 0.5	1.5	1.4	1.1	3	7	0.3	< 0.1	2

**Compliance History**

**Effluent Violations for Outfall 001, from: January 1, 2020 To: November 30, 2020**

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
TSS	03/31/20	Avg Mo	34	mg/L	30	mg/L

**Development of Effluent Limitations**

<b>Outfall No.</b> <u>001</u>	<b>Design Flow (MGD)</b> <u>.028</u>
<b>Latitude</b> <u>41° 1' 26.50"</u>	<b>Longitude</b> <u>-76° 22' 15.10"</u>
<b>Wastewater Description:</b> <u>Sewage Effluent</u>	

**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 <sub>5</sub>	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**

No “Reasonable Potential Analysis” was performed for toxics since they are not expected to be present in the wastewater, nor are they required to be tested due to the design flow and nature of the treatment facility.

The Department’s WQM7.0 model allows the Department to evaluate point source discharges of dissolved oxygen (DO), carbonaceous BOD (CBOD<sub>5</sub>), and ammonia-nitrogen (NH<sub>3</sub>-N) into free-flowing streams and rivers. To accomplish this, the model simulates two basic processes: the mixing and degradation of NH<sub>3</sub>-N in the stream and the mixing and consumption of DO in the stream due to the degradation of CBOD<sub>5</sub> and NH<sub>3</sub>-N. WQM7.0 modeling was previously performed for the discharge to an Unnamed Tributary to Susquehanna River and showed that the existing limitations are protective of water quality standards.

The Department’s chlorine demand spreadsheet was run during last permit issuance. The chlorine model showed that the above technology standard is protective of the stream.

Per the Department’s SOP for reissuance of NPDES permits, additional modeling is not required since no change to the discharge characteristics or receiving stream has occurred since the last permit issuance.

**Chesapeake Bay**

According to the Department’s Supplement to the Phase 2 Chesapeake Bay Watershed Implementation Plan (WIP), the facility is classified as a Phase 5 bay discharger (>0.002 MGD and <0.2 MGD). Phase 5 facilities are required to monitor for total nitrogen and total phosphorus at a rate of 1/year unless the facility has already conducted at least two years of nutrient monitoring and a summary of the results are included in the next permit fact sheet.

The permittee completed 33 months of nutrient sampling from December 2005 to August 2008. The summarized results of available data is as follows:

<b>Chesapeake Bay Nutrient Sample Results</b>				
<b>Parameter</b>	<b>Monthly Total (lbs)</b>		<b>Monthly Average (lbs/day)</b>	
	<b>TN</b>	<b>TP</b>	<b>TN</b>	<b>TP</b>
Jul-07	1195.3	173.4	38.6	5.6
Aug-07	1176.74	173.95	38.0	5.6
Sep-07	1149.8	178.8	38.3	6.0
Oct-07	1155.28	184.27	37.3	5.9
Nov-07	1182.79	184.75	39.4	6.2
Dec-07	1251.149	179.627	40.4	5.8
Jan-08	1323.6	186.3	42.7	6.0
Feb-08	1399	207	48.2	7.1
Mar-08	1249	215	40.3	6.9
Apr-08	1363.6	231.6	45.5	7.7
May-08	1216	218	39.2	7.0
Jun-08	1176	205	39.2	6.8
Jul-08	1166	201	37.6	6.5
Aug-08	1154	198	37.2	6.4
<b>AVERAGE</b>	<b>1226</b>	<b>195</b>	<b>40.1</b>	<b>6.4</b>

Since the facility has already performed the required nutrient monitoring, no additional monitoring will be required.

**Best Professional Judgment (BPJ) Limitations**

The existing monitoring frequencies for total residual chlorine (TRC), pH, and flow is 5/week. As recommended by the Department’s SOP for reissuance of NPDES permits, the monitoring frequency will be changed to 1/day.

**Anti-Backsliding**

There is no proposal to relax any effluent limitation within the proposed draft permit.

**Existing and 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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/day	Grab
DO	XXX	XXX	Report	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30	XXX	60	2/month	8-Hr Composite
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	16	XXX	32	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	5.5	XXX	11	2/month	8-Hr Composite

Compliance Sampling Location: 001

Other Comments: All of the above proposed effluent limitations and monitoring frequencies are the same as in the existing permit except for flow, TRC, and pH. These parameters were previously 5/week.

Standard Part C Conditions will apply in the permit. It is recommended the permit be drafted for public notice.