

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0064068
APS ID 751230
Authorization ID 1352495

Applicant and Facility Information

Applicant Name <u>Schuylkill County Municipal Authority</u>	Facility Name <u>Branch Cass WWTP</u>
Applicant Address <u>221 S. Centre Street</u> <u>Pottsville, PA 17901-3506</u>	Facility Address <u>Railroad Street</u> <u>Llewellyn, PA 17944</u>
Applicant Contact <u>Patrick Caulfield</u>	Facility Contact <u>Stephen Ulceski</u>
Applicant Phone <u>(570) 622-8240</u>	Facility Phone <u>(570) 622-8240</u>
Client ID <u>5024</u>	Site ID <u>539543</u>
Ch 94 Load Status <u>Not Overloaded</u>	Municipality <u>Branch Township</u>
Connection Status <u>No Prohibitions</u>	County <u>Schuylkill</u>
Date Application Received <u>April 29, 2021</u>	EPA Waived? <u>Yes</u>
Date Application Accepted <u>May 7, 2021</u>	If No, Reason <u>-</u>
Purpose of Application <u>Renewal of NPDES permit.</u>	

Summary of Review


The applicant is requesting renewal of an NPDES permit to discharge 0.45 MGD of treated sewage to West Creek, a CWF/MF designated receiving stream in state water plan basin 03-A (Upper Schuylkill River). As per the Department's current existing use list, the receiving stream does not have an existing use that is more protective than its designated use. The discharge is not expected to affect public water supplies. West Creek is listed as impaired for PCB contamination as well as acid mine drainage. This discharge isn't expected to contribute to the impairments.

Technology-based limits for CBOD₅, TSS, pH, and fecal coliform are carried over from the previous permit. The water quality-based limit for DO is carried over from the previous permit.

The existing TRC limitations (1.0 mg/L monthly average, 2.3 mg/L IMAX) are older technology-based limitations. One year after the permit effective date, the technology-based limitations from 92a.48(b)(2) will come into effect (0.5 mg/L monthly average, 1.6 mg/L IMAX). DEP's TRC calculation spreadsheet recommended more stringent water quality-based limitations for TRC (0.37 mg/L monthly average, 1.2 mg/L IMAX). These limits will come into effect three years after the permit effective date. The permittee may also collect site-specific data that can adjust the water quality-based limitations since several of the modeling inputs are default values (stream chlorine demand, discharge chlorine demand, etc. – see Part C.III.D.).

WQM 7.0 modeling recommended a summertime monthly average limitation of 7.6 mg/L for Ammonia-N to replace the current 9.0 mg/L limitation. eDMR data indicates the permittee can meet the more stringent limitation consistently, therefore, the new limitation will come into effect on the permit effective date. Limitations are added to the permit for Ammonia-N during the wintertime months (see DRBC requirements below) with the standard 2x IMAX multiplier.

DEP's Toxics Management Spreadsheet (TMS) was used to model the metals sample results submitted with the permit renewal application. Limitations are generally recommended for pollutants when the discharge concentration exceeds 50% of the calculated water quality-based effluent limitation. The submitted Total Copper results were 0.014 mg/L, 0.015 mg/L,

Approve	Deny	Signatures	Date
X		 Brian Burden, E.I.T. / Project Manager	July 28, 2025
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	7-30-25

Summary of Review

and 0.017 mg/L which were 45%, 48%, and 55% of the calculated WQBEL (0.031 mg/L), respectively. Quarterly monitoring/reporting is added to the permit for Total Copper. Results gathered during the next permit term will help determine if limitations are necessary in future renewals.

For modeling inputs, RMIs were obtained using the historic streams layer of DEP's eMapPA. Drainage areas and elevations were obtained from USGS's StreamStats interactive map. The low flow yield (LFY) of 0.17 cfs/mi² from previous renewals is based on data obtained from USGS stream gage 01467950 (West Branch Schuylkill River at Cressona, PA) and utilized during this renewal.

Monitoring requirements for influent BOD₅, influent TSS, Total Kjeldahl Nitrogen, Nitrate-Nitrite as N, Total Nitrogen, and Total Phosphorus are carried over in this renewal. Quarterly monitoring/reporting for E. Coli is added to the permit as per current guidance.

DRBC Docket No. D-2001-047 CP-2 is the most current docket for the WWTP. The requirements from Effluent Table C-2 below are included in this renewal.

EFFLUENT TABLE C-2: DRBC Parameters Not Included in NPDES Permit

OUTFALL 001 (Discharging to West Creek)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l *	Quarterly
CBOD ₅ (at 20° C) Influent	Monitor & Report	Monthly
Ammonia Nitrogen (11-1 to 4-30)	20 mg/l	Monthly

The 2024 Chapter 94 report for the WWTP shows no current or projected hydraulic/organic overloads. There are three open violations for the client originating from other facilities that may warrant withholding issuance of the final permit. The previously issued NPDES permit expired on October 31, 2021 and the renewal application was submitted in a timely manner.

Sludge use and disposal description and location(s): The latest Sewage Sludge / Biosolids Production and Disposal supplemental report indicates 6.92 dry tons of sludge was hauled to the reed beds onsite.



WQM
Modeling.pdf



TRC Calculation.pdf TMS PA0064068.pdf



Watershed
Information.pdf



2001-047 CP-2.pdf

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.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.45</u>
Latitude	<u>40° 40' 1.3"</u>	Longitude	<u>-76° 16' 46.34"</u>
Quad Name	<u>Minersville</u>	Quad Code	<u>1335</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>West Creek</u>	Stream Code	<u>2339</u>
NHD Com ID	<u>133228615</u>	RMI	<u>0.4</u>
Drainage Area	<u>10.1 mi²</u>	Yield (cfs/mi ²)	<u>0.17</u>
Q ₇₋₁₀ Flow (cfs)	<u>1.717</u>	Q ₇₋₁₀ Basis	<u>Gage 01467950</u>
Elevation (ft)	<u>710</u>	Slope (ft/ft)	<u>0.0047</u>
Watershed No.	<u>3-A</u>	Chapter 93 Class.	<u>CWF, MF</u>
Existing Use	<u>-</u>	Existing Use Qualifier	<u>-</u>
Exceptions to Use	<u>-</u>	Exceptions to Criteria	<u>-</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Flow Regime Modification, Polychlorinated Biphenyls (PCBs), Siltation</u>		
Source(s) of Impairment	<u>Acid Mine Drainage, Surface Mining, Urban Runoff / Storm Sewers, Unknown Sources</u>		
TMDL Status	<u>Final</u>	Name	<u>Schuylkill River PCB TMDL</u>
Background/Ambient Data		Data Source	
pH (SU)	<u>-</u>		<u>-</u>
Temperature (°F)	<u>-</u>		<u>-</u>
Hardness (mg/L)	<u>-</u>		<u>-</u>
Other:	<u>-</u>		<u>-</u>
Nearest Downstream Public Water Supply Intake	<u>Pottstown Borough Water Authority</u>		
PWS Waters	<u>Schuylkill River</u>	Flow at Intake (cfs)	<u>168 (StreamStats estimate)</u>
PWS RMI	<u>57</u>	Distance from Outfall (mi)	<u>~71.5</u>

Treatment Facility Summary				
Treatment Facility Name: SCMA Branch Cass WWTP				
WQM Permit No.		Issuance Date		
5401405		8/13/2002		
5401404		10/29/2001		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	SBR	Gas Chlorine	0.45
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.45	938	Not Overloaded	Sludge Digester	Reed Beds



Development of Effluent Limitations

Outfall No. 001
Latitude 40° 40' 1.3"
Wastewater Description: Sewage Effluent

Design Flow (MGD) 0.45
Longitude -76° 16' 47.1"

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	25.0	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40.0	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
	50.0	IMAX	-	-
Total Suspended Solids	30.0	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45.0	Average Weekly	133.102(b)(2)	92a.47(a)(2)
	60.0	IMAX	-	-
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)
	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)
	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)
	1.6	IMAX	-	-

Comments: The technology-based TRC limitations come into effect 1 year after the permit effective date.

Water Quality-Based Limitations


The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
Ammonia-N (5/1 – 10/31)	7.6	Average Monthly	2025 WQM 7.0
	15.2	IMAX	
Ammonia-N (11/1 – 4/30)	20.0	Average Monthly	DRBC Docket D-2001-047 CP-2
	40.0	IMAX	
Total Dissolved Solids	1,000	Average Quarterly	DRBC Docket D-2001-047 CP-2
Total Residual Chlorine	0.37	Average Monthly	2025 TRC Calculation Spreadsheet
	1.2	IMAX	
Dissolved Oxygen	5.0	Minimum	Previous modeling

Comments: The water quality-based TRC limitations come into effect 3 years after the permit effective date.

Anti-Backsliding

No limitations were removed from the permit or made less stringent.

Approve	Deny	Signatures	Date
X		 Brian Burden, E.I.T. / Project Manager	July 28, 2025
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	7-30-25