pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0024015**
Facility Type	**Municipal**	APS ID	**629655**
Major / Minor	**Minor**	Authorization ID	**1212483**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Cressona Borough Authority**	Facility Name	**Cressona Borough Sewer Treatment Plant**
Applicant Address	58 South Sillyman Street	Facility Address	58 South Sillyman Street, Rear
	Cressona, PA 17929-1117		Cressona, PA 17929
Applicant Contact	Gail M. Buffington, Authority Manager	Facility Contact	Scott Lutz, Chief Operator
Applicant Phone	(570) 385-0185	Facility Phone	(570) 385-1155
Client ID	78409	Site ID	543303
Ch 94 Load Status	-	Municipality	Cressona Borough
Connection Status	-	County	Schuylkill
Date Application Received	November 14, 2017	EPA Waived?	Yes
Date Application Accepted	November 30, 2017	If No, Reason	-
Purpose of Application	Renewal of NPDES permit for discharge of treated sewage.		

Summary of Review

The applicant is requesting the renewal of an NPDES permit to discharge up to 0.72 MGD of treated sewage into the West Branch Schuylkill River, a Cold-Water Fishery, Migratory Fish (CWF, MF) receiving stream in State Water Plan Basin 3-A (Upper Schuylkill River). As per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than its designated use. This stream segment is not designated as a naturally reproducing trout stream as per PA Fish & Boat Commission. This discharge is not expected to affect public water supplies.

Limitations for pH, $CBOD_5$, Total Suspended Solids (TSS), and Fecal Coliform are technology-based and carried over from the previous permit. A BPJ-based limitation for Dissolved Oxygen (DO) has been added to the permit.

WQM modeling recommended stricter summertime limitations for Ammonia-Nitrogen (13.8 mg/L monthly average). eDMR data from the past year confirms the facility should be able to meet the new limits. Wintertime monitoring/reporting for Ammonia-Nitrogen and quarterly monitoring/reporting for Total Nitrogen, Total Phosphorous, Total Kjeldahl Nitrogen, and Nitrate-Nitrite as N have been maintained in this permit. The monitoring/reporting of BOD_5 and TSS of the Raw Sewage Influent has also been maintained in this permit.

The Total Residual Chlorine (TRC) Calculation Spreadsheet recommends stricter limitations than the previous permit. The permittee will be required to meet the new technology-based limits for TRC starting three years after the effective date of the permit (see Part C.III.). TRC limitations from the previously issued permit are in effect for the first three years after the permit effective date.

Total Maximum Daily Loads (TMDLs) exist for both the the West Branch Schuylkill River Watershed and the Upper Schuylkill River. The TMDLs address metals (iron, manganese, and aluminum) and pH associated with acid mine drainage (AMD). There are no approved Waste Load Allocations (WLA) for this facility under either TMDL. Quarterly monitoring/reporting for iron, manganese, and aluminum has been maintained in this permit.

Approve	Deny	Signatures	Date
X		/s/ Allison Seyfried / Environmental Engineering Specialist	August 28, 2019
X		/s/ Amy M. Bellanca, P.E. / Environmental Engineer Manager	August 28, 2019

Summary of Review

A TMDL also exists for the Schuylkill River (Schuylkill, Berks, Montgomery, Chester, and Philadelphia Counties, PA) for PCBs and is treated as a non-point source contaminant. There are no approved Waste Load Allocations (WLA) for this facility. Since this is a sewage discharge with no industrial contributors and the use of PCB in the United States has been banned since July of 1979, no PCBs are expected to be present in the effluent.

For this permit renewal, all monitoring frequencies for parameters with limitations are consistent with the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits* (document no. 362-0400-001).

There are no representative stream gages in the vicinity of the outfall. The state-wide default low flow yield (LFY) of 0.1 cfs/mi^2 was used to model the discharge. RMI values were obtained using the Department's eMapPA, drainage areas were delineated using USGS's StreamStats interactive map, and elevations were obtained using the elevation profile tool on StreamStats.

As per the permittee's Sewage Sludge and Biosolids Supplemental Report forms, sludge is hauled to the Commonwealth Environmental Services (CES) Landfill in Foster Township, Schuylkill County, PA by Waste Management.

The existing permit expired on May 31, 2018 and the application for renewal was received on time.

A Water Management System Inspection query indicated that on February 27, 2019 a Compliance Evaluation was performed.

There are no open violations for this client that warrant withholding issuance of this permit.


Watershed Info - Cressona Borough.p


TRC_CALC - Cressona Borough.p


WQM - Cressona Borough.pdf


Schuylkill_River_PCB_TMDL.pdf


Upper Schuylkill River TMDL Final.pdf


WestBranchSchuylkillRiver_TMDL.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.	001	Design Flow (MGD)	0.72
Latitude	40º 37' 46.91"	Longitude	-76º 11' 21.72"
Quad Name	Pottsville	Quad Code	1336
Wastewater Description:	Sewage Effluent		
Receiving Waters	West Branch Schuylkill River (CWF, MF)	Stream Code	2329
NHD Com ID	25991190	RMI	0.6500
Drainage Area	53.7 mi^2	Yield (cfs/mi^2)	0.10
Q_{7-10} Flow (cfs)	5.37	Q_{7-10} Basis	State-wide default
Elevation (ft)	523.5	Slope (ft/ft)	-
Watershed No.	3-A	Chapter 93 Class.	CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired		
Cause(s) of Impairment	FLOW REGIME MODIFICATION, FLOW REGIME MODIFICATION, HABITAT ALTERATIONS, HABITAT ALTERATIONS, Metals, POLYCHLORINATED BIPHENYLS (PCBS), SILTATION		
Source(s) of Impairment	ACID MINE DRAINAGE, ACID MINE DRAINAGE, CHANNELIZATION, HIGHWAY/ROAD/BRIDGE RUNOFF (NON-CONSTRUCTION RELATED), SOURCE UNKNOWN, STREAMBANK MODIFICATIONS/DESTABILIZATION, URBAN RUNOFF/STORM SEWERS		
TMDL Status	Final, Final, Tentative	Name	Schuylkill River PCB TMDL,Upper Schuylkill River ,West Branch Schuylkill River Watershed
Nearest Downstream Public Water Supply Intake	Pottstown Borough Water Authority		
PWS Waters	Schuylkill River	Flow at Intake (cfs)	-
PWS RMI	57	Distance from Outfall (mi)	~ 63

Treatment Facility Summary

Treatment Facility Name: Cressona Borough Sewer Treatment Plant

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Sequencing Batch Reactors (SBR)	Chlorine	0.298

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.72	1,200	-	Aerobic Digestors	Hauled

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.72
Latitude 40º 37' 45.00" **Longitude** -76º 11' 30.00"
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
$CBOD_5$	25.0	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)
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)
	1.6	IMAX		
Dissolved Oxygen	5.0	Minimum	-	BPJ

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Ammonia-Nitrogen Nov 1 - Apr 30	Report	Average Monthly	WQM 7.0
Ammonia-Nitrogen May 1 - Oct 31	13.8	Average Monthly	
BOD_5 - Raw Sewage Influent	Report	Average Monthly	Maintained from Previous Permit
Total Suspended Solids - Raw Sewage Influent	Report	Average Monthly	
Total Aluminum	Report	Average Monthly	Maintained from Previous Permit (West Branch Schuylkill River Watershed TMDL and the Upper Schuylkill River TMDL)
Total Iron	Report	Average Monthly	
Total Manganese	Report	Average Monthly	

Anti-Backsliding

No limitations were made less stringent.