Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0030139**
Facility Type	**Non-Municipal**	APS ID	**523154**
Major / Minor	**Minor**	Authorization ID	**1477266**

Applicant and Facility Information

Applicant Name	**PA Department of Corrections**	Facility Name	**State Correctional Institute - Dallas**
Applicant Address	1000 Follies Road	Facility Address	1000 Follies Road
	Dallas, PA 18612		Dallas, PA 18612
Applicant Contact	Jasen Bohinski	Facility Contact	Christopher Mitkowski
Applicant Phone	(570) 675-1101	Facility Phone	(570) 675-1101 x359
Client ID	43607	Site ID	516545
Ch 94 Load Status	Not Overloaded	Municipality	Jackson Township
Connection Status	No Limitations	County	Luzerne
Date Application Received	March 14, 2024	EPA Waived?	No
Date Application Accepted	March 14, 2024	If No, Reason	Significant CB Discharge

Purpose of Application: Renewal of NPDES permit.

Summary of Review

The applicant is requesting the renewal of their NPDES Permit to discharge up to 0.45 MGD of treated sewage into East Fork Harveys Creek, a Cold Water and Migratory Fish (CWF, MF) designated stream in State Watershed 05-B (Toby - Wapwallopen Creeks). As per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than the designated use. The discharge is not expected to affect public water supplies.

The existing effluent limits for CBOD5, TSS, Fecal Coliform, and pH are technology-based and carried over in this renewal. The existing limits for DO, TRC and NH3-N are water quality-based and carried over in this renewal. Since the facility currently utilizes ultraviolet radiation for disinfection, the monthly average limitation for TRC is removed from the permit and the minimum monitoring frequency is updated to “Daily When Discharging”. The permittee is required to monitor for TRC in the effluent only on days where the permittee utilizes chlorine at the WWTP for backup disinfection, cleaning, or any other purposes (See Part C.I.E.).

The following Part C.I.F. special condition for UV system monitoring is included in this renewal:

The permittee shall report operation of the ultraviolet (UV) disinfection system on a daily basis using the Daily Effluent Monitoring Form (3800-FM-BCW0435) and the parameter named “UV Functional” The permittee shall report values of “1” for Yes (i.e., the UV system is functional) and “< 1” for No (i.e., the UV system is not functional). The UV system shall be considered functional when all components that are necessary for disinfection to achieve effluent limitations in Part A of this permit are operating properly.

To quantify nutrient reduction needs, maximum nutrient loads (cap loads) for each major watershed tributary to the Chesapeake Bay were established. This included allocation of cap loads for Total Nitrogen (TN) and Total Phosphorus (TP) in Pennsylvania for the Potomac and Susquehanna watersheds. The allocations assigned for TN and TP for this facility are

Approve	Deny	Signatures	Date
X		Brian Burden, E.I.T. / Project Manager	January 6, 2024
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. /Acting Engineer Manager	1-17-25

Summary of Review

9,741 lbs/yr and 1,218 lbs/yr, respectively (see PA DEP's *Phase 3 Watershed Implementation Plan Wastewater Supplement*, revised 9/13/2021). Twice per week monitoring requirements for Total Kjeldahl Nitrogen, Nitrate+Nitrite-Nitrogen, and Total Phosphorus are continued in this renewal along with monthly and annual mass load reporting requirements.

An annual DMR must be submitted by the end of the truing period, November 28th. As attachments to the annual DMR, the facility must submit a completed Annual Chesapeake Bay Spreadsheet, available through DEP's Supplemental Reports website, which contains an Annual Nutrient Monitoring worksheet and an Annual Nutrient Budget worksheet. The spreadsheet shall be submitted once per compliance year and reflect all nutrient sample results (for the period October 1 – September 30), credit transactions (including the truing period), and offsets applied during the compliance year.

The discharge was modeled using DEP's WQM 7.0, TRC calculation spreadsheet, and the Toxics Management Spreadsheet (TMS). For modeling inputs, the drainage areas were delineated using USGS's StreamStats interactive map, elevations were obtained using the StreamStats elevation profile tool, and RMIs were obtained using DEP's eMapPA. The statewide default low flow yield (LFY) of 0.1 cfs/mi^2 was utilized since there's no nearby representative stream gages to obtain current data from. WQM 7.0 and the TRC calculation spreadsheet did not recommend more stringent limitations.

During the previous renewal, limits were recommended for Total Copper, Total Lead, and Total Zinc. Due to the small sampling set provided at that time, quarterly monitoring/reporting requirements were incorporated into the permit to obtain more sampling data for these pollutants. The TMS made the following recommendations using the pollutant sampling information submitted with the renewal application:

	Mass Limits		*Concentration Limits*			
Pollutants	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units
Total Copper	0.051	0.077	0.014	0.02	0.02	mg/L
Total Lead	0.017	0.027	0.005	0.007	0.012	mg/L
Total Zinc	0.45	0.66	0.12	0.18	0.18	mg/L

Total Copper – The maximum reported concentration on the renewal application was 0.017 mg/L. The most stringent WQBEL was calculated to be 0.014 mg/L and is based on chronic fish criteria. Since it appears the permittee can't currently meet the limitations, a Toxics Reduction Evaluation (TRE) is included in Part C of the permit for Total Copper and the limitations will come into effect four years after the permit effective date. As part of the TRE, the permittee may conduct site specific studies to refine the modeling inputs. Several default inputs were used in the discharge modeling. The TRE includes milestones that must be met before the limitations come into effect, and monitoring/reporting requirements are included in the permit until then.

Total Lead - The maximum reported concentration on the renewal application was 0.014 mg/L. The most stringent WQBEL was calculated to be 0.005 mg/L and is based on chronic fish criteria. Since it appears the permittee can't currently meet the limitations, a TRE is included in the permit for Total Lead and the limitations will come into effect four years after the permit effective date. Monitoring/reporting requirements are included in the permit until the limitations come into effect.

Total Zinc - The maximum reported concentration on the renewal application was 0.081 mg/L. The most stringent WQBEL was calculated to be 0.12 mg/L and is based on acute fish criteria. It appears the permittee can currently meet the limitations, however, since the reported concentration is approximately 67% of the recommended WQBEL, the limitations will come into effect four years after the permit effective date. A compliance schedule with similar milestones is included in Part C. Monitoring/reporting requirements are included in the permit until the limitations come into effect.

Quarterly monitoring/reporting requirements are added to the permit for E. Coli as per current guidance.

Sludge use and disposal description and location(s): The latest Sewage Sludge / Biosolids Production and Disposal supplemental DMR form states approximately 74,700 gallons of liquid sludge was hauled to the Wyoming Valley Sanitary Authority WWTP in November 2024 via Biros Septic.

WQM Modeling.pdf TMS PA0030139.pdf TRC Calculation.pdf Watershed Information.pdf

Summary of Review
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)	0.45
Latitude	41º 16' 42.74"	Longitude	-76º 0' 36.09"
Quad Name	Harveys Lake	Quad Code	0837
Wastewater Description:	Sewage Effluent		

Receiving Waters	East Fork Harveys Creek	Stream Code	28318
NHD Com ID	65633837	RMI	2.5
Drainage Area	3.21 mi^2	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	0.321	Q_{7-10} Basis	Default LFY
Elevation (ft)	1,068	Slope (ft/ft)	0.022
Watershed No.	5-B	Chapter 93 Class.	CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired		
Cause(s) of Impairment	Organic enrichment, turbidity		
Source(s) of Impairment	Natural and unknown sources		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Danville Municipal Water Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1123
PWS RMI	122.5	Distance from Outfall (mi)	~48

Treatment Facility Summary

Treatment Facility Name: SCI Dallas

WQM Permit No.	Issuance Date
4015401	11/6/2015

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Sequencing Batch Reactor	Ultraviolet	0.45

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.45	1,043	Not Overloaded	Aerobic Digestion	Land Application

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.45
Latitude 41º 16' 42.74" **Longitude** -76º 0' 36.09"
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)
	50.0	IMAX	-	-
Total Suspended Solids	30.0	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	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)

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Total Residual Chlorine	0.25	IMAX	Previous modeling
Dissolved Oxygen	5.0	Minimum	Previous modeling
Ammonia-N (5/1 – 10/31)	2.5	Average Monthly	Previous modeling
	5.0	IMAX	
Ammonia-N (11/1 – 4/30)	7.5	Average Monthly	
	15.0	IMAX	
Total Copper	0.014	Average Monthly	2025 Toxics Management Spreadsheet
	0.020	IMAX	
Total Lead	0.005	Average Monthly	
	0.012	IMAX	
Total Zinc	0.12	Average Monthly	
	0.18	IMAX	

Comments: The Total Copper, Total Lead, and Total Zinc limitations will come into effect four years after the permit effective date.

Anti-Backsliding

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

Pennsylvania
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X		Brian Burden, E.I.T. / Project Manager	January 6, 2024
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. /Acting Engineer Manager	1-17-25