

Application Type

Renewal

Facility Type

Non-Municipal

Major / Minor

Minor

Application No.

PA0060445

APS ID

18263

Authorization ID

1306688

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	Pennsylvania Historical and Museum Commission	Facility Name	Eckley Miners' Village WWTP
Applicant Address	2 Eckley Main Street	Facility Address	Eckley Road
	Weatherly, PA 18255		Foster Township, PA 18255
Applicant Contact	Bode Morin	Facility Contact	Bode Morin
Applicant Phone	(570) 636-2070	Facility Phone	(570) 636-2070
Client ID	95627	Site ID	241725
Ch 94 Load Status	N/A	Municipality	Foster Township
Connection Status	N/A	County	Luzerne
Date Application Received	<u>February 12, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>February 12, 2020</u>	If No, Reason	<u>-</u>
Purpose of Application	Renewal of NPDES permit.		

Summary of Review

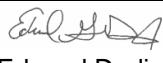
A draft permit was issued on October 4, 2021, but the permit was not finalized. A new reviewer was assigned and a few changes were made to this 2nd draft permit.

The applicant is requesting renewal of their NPDES permit to discharge up to 0.02 MGD of treated sewage from the Eckley Miners' Village wastewater treatment plant (WWTP) into an unnamed tributary to Black Creek. Black Creek is a cold-water & migratory fish (CWF/MF) receiving stream in State Water Plan Basin 05-D (Nescopeck Creek). As per the Department's current existing use list, Black Creek does not have an existing use classification that is more protective than the designated use.

The unnamed tributary doesn't appear on DEP's eMap application. USGS's StreamStats interactive map shows a drainage channel entering Black Creek approximately 1 ½ miles to the west of Outfall 001. Outfall 001 discharges to a coal desilting basin and the drainage channel leading to Black Creek passes near active surface mining areas operated by Northampton Fuel Supply (permit 40663029, Auth ID 1346209 – issued 11/29/2021).

Black Creek is listed as impaired in the 2024 Pennsylvania Integrated Water Quality Monitoring Report for abandoned mine drainage (AMD) – metals and low pH. Black Creek is part of the Black Creek, Little Nescopeck Creek and UNT Little Nescopeck Creek Watershed TMDL. The TMDL metals of concern (aluminum, iron, and manganese) are typically not parameters of concern in sewage treatment plants with no industrial contributors. The TMDL doesn't assign point source waste load allocations to this facility. Since the discharge is not expected to contribute to the AMD impairment, no monitoring requirements are included in the permit for the TMDL metals of concern.

Limitations for CBOD₅, TSS, TRC, pH and Fecal Coliform are technology-based and carried over from the previous renewal. The Ammonia-N limitations and Dissolved Oxygen minimum are based on BPJ and carried over from the previous renewal.

Approve	Deny	Signatures	Date
X		 Brian Burden, E.I.T. / Project Manager	February 18, 2025
X		 Edward Dudick, P.E. / Environmental Engineer Manager	February 18, 2025

Summary of Review

Annual monitoring/reporting requirements for Total Nitrogen (TKN & Nitrate+Nitrite-N) and Total Phosphorus are also carried over. Annual monitoring/reporting is added to the permit for E. Coli as per current DEP guidance.

The discharge was modeled with WQM 7.0 and the TRC calculation spreadsheet and no water quality-based limitations were recommended. The Toxics Management Spreadsheet wasn't utilized since there are no applicable sample results to model with it. The confluence with Black Creek was considered the first modeling point due to the conditions described above and the default low flow yield (LFY) of 0.1 cfs/mi² was utilized since there's no downstream or representative stream gages to obtain data from. Drainage areas were delineated using USGS's StreamStats, RMIs were obtained from the historical stream layer of DEP's eMapPA and the "measure" tool, and elevations were obtained using the elevation profile tool in StreamStats.

Since the method of disinfection is ultraviolet (UV) radiation, the average monthly limitation of 0.5 mg/L from previous renewals is removed from the permit. The IMAX limitation of 1.6 mg/L remains in the permit and TRC must be sampled for "daily when discharging" in the event the permittee utilizes chlorine for backup disinfection, cleaning, or other purposes (see Part C.I.E.).

The following template Part C.I.F. condition is added to the permit for UV monitoring:

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.

The minimum measurement frequency for all parameters with limitations are consistent with Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits.

Sludge use and disposal description and location(s): The permit renewal application indicates 0.313 dry tons of sewage sludge was hauled to the Greater Hazleton Joint Sewer Authority WWTP during the previous year.



Watershed
Information.pdf



WQM
Modeling.pdf



TRC Calculation.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)	0.02
Latitude	40° 59' 36"	Longitude	-75° 52' 0"
Quad Name	Weatherly	Quad Code	1139
Wastewater Description: Sewage Effluent			
Receiving Waters	Unnamed Tributary to Black Creek	Stream Code	28109 (Black Creek)
NHD Com ID	65639227	RMI	22.3 (at Black Creek confluence)
Drainage Area	6.34 mi ² (at Black Creek confluence)	Yield (cfs/mi ²)	0.1
Q ₇₋₁₀ Flow (cfs)	0.634	Q ₇₋₁₀ Basis	Statewide default LFY
Elevation (ft)	1537	Slope (ft/ft)	0.0006
Watershed No.	5-D	Chapter 93 Class.	CWF/MF (Black Creek)
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired		
Cause(s) of Impairment	High Metals, low pH		
Source(s) of Impairment	Abandoned Mine Drainage		
TMDL Status	Final	Name _____	
Background/Ambient Data			
pH (SU)	7	Data Source	
Temperature (°C)	20	Default	
Hardness (mg/L)	-	Default CWF	
Other:	-	-	
Nearest Downstream Public Water Supply Intake			
PWS Waters	Susquehanna River	Danville Municipal Water Authority	
PWS RMI	122.5	Flow at Intake (cfs)	-
		Distance from Outfall (mi)	~54

Treatment Facility Summary				
Treatment Facility Name: Eckley Miners Village - WWTP				
WQM Permit No.	Issuance Date			
4009410	5/25/2010			
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	UV Radiation	0.02
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.02	-	-	Aerobic Digestion	Hauled

Development of Effluent Limitations

Outfall No. 001
Latitude 40° 59' 36"
Wastewater Description: Sewage Effluent

Design Flow (MGD) 0.02
Longitude -75° 52' 0"

Technology-Based & BPJ Limitations

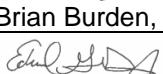
The following technology-based limitations and BPJ limitations apply:

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)
Total Residual Chlorine	1.6	IMAX	-	-
Ammonia-N	25.0	Average Monthly	-	BPJ
	50.0	IMAX	-	
Dissolved Oxygen	5.0	Minimum	-	BPJ

Anti-Backsliding

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



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X		 Brian Burden, E.I.T. / Project Manager	February 18, 2025
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