

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL INDUSTRIAL WASTE (IW)
AND IW STORMWATER**

Application No. PA0070394
APS ID 783340
Authorization ID 1339793

Applicant and Facility Information

Applicant Name	<u>PA DEP – NERO HSCA</u>	Facility Name	<u>Herceg Landfill HSCA Site</u>
Applicant Address	<u>2 Public Square</u> <u>Wilkes Barre, PA 18701-1915</u>	Facility Address	<u>Gower Road</u> <u>Nazareth, PA 18064</u>
Applicant Contact	<u>Eric Supey</u>	Facility Contact	<u>Ronald Schock</u>
Applicant Phone	<u>(570) 826-2511</u>	Facility Phone	<u>(610) 861-2155</u>
Client ID	<u>89901</u>	Site ID	<u>256039</u>
SIC Code	<u>4953</u>	Municipality	<u>Bushkill Township</u>
SIC Description	<u>Trans. & Utilities - Refuse Systems</u>	County	<u>Northampton</u>
Date Application Received	<u>July 27, 2017</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>July 27, 2017</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 0.052 MGD of treated leachate from a closed sanitary landfill to Tributary 3399 to East Branch Monocacy Creek, a high quality-cold water fishery, migratory fishery-designated receiving stream in State Water Plan basin 2-C (Lower Lehigh River). 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 landfill closed in 1981. After the permittee (Mamie Herceg) passed away, the Department took over the permit responsibilities including effluent monitoring and submission of DMRs under the HSCA program. The treatment system is a passive system consisting of two lagoons connected by a cascade, and a V-notch weir discharging via a swale (approximately 100 feet) to Tributary 3399 to East Branch Monocacy Creek.

Effluent Limitations Guidelines (ELG) became effective in February 2000 for the Landfills Point Source Category (40 CFR Part 445). The landfill is a RCRA Subtitle D Non-Hazardous Waste Landfill and the BPT effluent limitations of §445.21 apply and are carried over from the previous permit.

Toxics Management Spreadsheet modeling (attached) indicate slightly more stringent water quality-based limitations are required for Total Iron. The new limitations will come into effect four years after the permit effective date. Data from USGS's Open-File Report 2011-1070 for stream gage 01452500 (Monocacy Creek at Bethlehem, PA) was used to model the discharge, resulting in a low flow yield (LFY) of 0.296 cfs/mi². Note that modeling in the previously issued permit utilized an LFY of 0.292 cfs/mi². For modeling inputs, RMI values were obtained using the "PA Historic Streams" feature of eMapPA as well as the "measure" tool. Drainage areas were delineated using USGS's StreamStats Interactive Map and elevations were obtained using the elevation profile feature of StreamStats (see Watershed Information attachment).

Approve	Deny	Signatures	Date
X		<i>Brian Burden</i> Brian Burden, E.I.T. / Project Manager	February 23, 2021
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	2-24-21

Summary of Review

The standard Part C.II template condition titled *Water Quality-Based Effluent Limitations for Toxic Pollutants* is added to the permit to give the permittee the option of performing site-specific data collection studies to modify the new water quality-based effluent limitations for Total Iron. References to performing a Toxics Reduction Evaluation (TRE) were removed from the template condition since the source of the pollutants is known.

The standard Part C template condition titled *Landfill Leachate Conditions* is not included in this renewal since there is no active Waste Management permit for this site.

Pollutants previously monitored on an annual basis will continue to be monitored on an annual basis for this renewal. Pollutants previously monitored on a quarterly basis will now require monthly monitoring due to frequent effluent exceedances during the previous permit cycle (see below). Monthly sampling results will provide better representation of the pollutants entering Tributary 3399 to East Branch Monocacy Creek from this source and may help to understand possible impacts of seasonal variations on the effluent.

Active landfills require sampling results for Pollutant Groups 1 – 6 to be included with the permit application. As an abandoned HSCA site, the funding to complete the sampling is not available.

There are no open WPC NPDES violations for this client that warrant withholding the issuance of this permit. DMR review over the past two years revealed the following quarterly average and geometric mean effluent limitation exceedances:

Ammonia-N (limitation was 4.9 mg/L)

- 4th Quarter 2020: 6.38 mg/L
- 3rd Quarter 2020: 10.88 mg/L
- 1st Quarter 2020: 16.04 mg/L
- 3rd Quarter 2019: 20.54 mg/L
- 2nd Quarter 2019: 17.33 mg/L
- 1st Quarter 2019: 25.00 mg/L

Fecal Coliform (limitation was 200 No./100mL)

- 4th Quarter 2019: 950 No./100mL
- 3rd Quarter 2019: 350 No./100mL

Total Iron (limitation was 4.7 mg/L)

- 2nd Quarter 2020: 12.99 mg/L
- 4th Quarter 2019: 286.8 mg/L
- 1st Quarter 2019: 5.49 mg/L

Total Suspended Solids (limitation was 27 mg/L)

- 3rd Quarter 2020: 40 mg/L
- 2nd Quarter 2020: 112 mg/L
- 4th Quarter 2019: 918 mg/L



Watershed Information.pdf



Toxics Management Spreadsheet.pdf



WQM 1.pdf



WQM 2.pdf



WQM 3.pdf



WQM 4.pdf



WQM 5.pdf



WQM 6.pdf

Public Participation

Summary of Review

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>0.052</u>
Latitude	<u>40° 45' 13"</u>	Longitude	<u>-75° 20' 29"</u>
Quad Name	<u>Wind Gap</u>	Quad Code	<u>1243</u>
Wastewater Description: <u>Treated landfill leachate.</u>			
Receiving Waters	<u>Tributary 3399 of East Branch Monocacy Creek (HQ-CWF/MF)</u>	Stream Code	<u>3399</u>
NHD Com ID	<u>26290901</u>	RMI	<u>0.35</u>
Drainage Area	<u>0.56 mi²</u>	Yield (cfs/mi ²)	<u>0.296</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.165</u>	Q ₇₋₁₀ Basis	<u>Gage 01452500</u>
Elevation (ft)	<u>530</u>	Slope (ft/ft)	<u>0.015</u>
Watershed No.	<u>2-C</u>	Chapter 93 Class.	<u>HQ-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>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>-</u>		
Source(s) of Impairment	<u>-</u>		
TMDL Status	<u>-</u>	Name	<u>-</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>Keystone Water Company</u>		
PWS Waters	<u>Delaware River</u>	Flow at Intake (cfs)	<u>-</u>
PWS RMI	<u>-</u>	Distance from Outfall (mi)	<u>65</u>

Other Comments: Since DEP's "NERO Surface Sources" program was unavailable during the creation of this fact sheet, the nearest downstream public water supply intake information was copied from the fact sheet of the previous renewal. This information has no bearing on this permit renewal due to the relatively large distance from Outfall 001 to the intake structure on the Delaware River.

Development of Effluent Limitations

Outfall No. 001 Design Flow (MGD) 0.052
 Latitude 40° 45' 13" Longitude -75° 20' 29"
 Wastewater Description: Other Miscellaneous Discharges

40 CFR §445.21 BPT Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/L)	SBC	Federal Regulation
BOD ₅	37.0	Average Monthly	\$445.21
	140	Daily Maximum	
Total Suspended Solids	27.0	Average Monthly	\$445.21
	88.0	Daily Maximum	
Ammonia-Nitrogen	4.9	Average Monthly	\$445.21
	10.0	Daily Maximum	
Alpha-Terpineol	0.016	Annual Average	\$445.21
	0.033	Daily Maximum	
Benzoic Acid	0.071	Annual Average	\$445.21
	0.12	Daily Maximum	
p-Cresol	0.014	Annual Average	\$445.21
	0.025	Daily Maximum	
Phenol	0.015	Annual Average	\$445.21
	0.026	Daily Maximum	
Total Zinc	0.11	Annual Average	\$445.21
	0.20	Daily Maximum	
pH	6.0 – 9.0 S.U.	Min – Max	\$445.21

Comments: The ELG includes average monthly and daily maximum limits. Some average monthly limitations were converted to annual average limitations. Instantaneous maximum limits are included in the permit, using a multiplier of 2.5 per the effluent limits SOP (doc. No. 362-0400-001), except for those parameters where the resulting IMAX limit would be less than the daily maximum limit from the ELG (BOD₅ and TSS).

Water Quality-Based Limitations

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

Parameter	Limit (mg/L)	SBC	Model / Basis
Total Iron	4.59	Average Monthly	DEP Toxics Management Spreadsheet Version 1.1, October 2020
	7.16	Daily Maximum	
	11.47	IMAX	
Fecal Coliform	200 No./100mL	Geometric Mean	PA Code 93.7 BAC ₁
	1,000 No./100mL	IMAX	-

Comments: Limitations above for Total Iron come into effect 4 years after the permit effective date. Until then, the following water quality-based limitations apply: 4.9 mg/L Average Monthly, 10.0 mg/L Daily Maximum, 12.0 mg/L IMAX.