

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

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

Application No. PA0103896
APS ID 980459
Authorization ID 1251160

Applicant and Facility Information

Applicant Name	<u>County Landfill, Inc.</u>	Facility Name	<u>County Landfill</u>
Applicant Address	<u>344 Walley Run Drive</u> <u>Leeper, PA 16233</u>	Facility Address	<u>344 Walley Run Drive</u> <u>Leeper, PA 16233-4128</u>
Applicant Contact	<u>Allen Bradburn</u>	Facility Contact	<u>John Redfoot</u>
Applicant Phone	<u>(513) 616-7104</u>	Facility Phone	<u>(724) 699-2042</u>
Client ID	<u>28034</u>	Site ID	<u>236572</u>
SIC Code	<u>4953</u>	Municipality	<u>Farmington Township</u>
SIC Description	<u>Trans. & Utilities - Refuse Systems</u>	County	<u>Clarion</u>
Date Application Received	<u>October 29, 2018</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>October 31, 2018</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of a NPDES Permit for an existing discharge of industrial waste.</u>		

Summary of Review

The industrial waste generated at this site is leachate from a closed municipal landfill. The official closure of the landfill was certified on July 15, 2011.

The treatment system associated with Outfall 001 has not been operating since January 2016. Collected leachate has instead been shipped offsite for disposal. The permit wishes to retain this permit in the event the treatment plant is reactivated.

There are currently no open violations listed for the permittee in EFACTS (10/28/2019).

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.

Approve	Deny	Signatures	Date
X		Adam J. Pesek, E.I.T. / Environmental Engineering Specialist	
X		Justin C. Dickey, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.012</u>
Latitude	<u>41° 23' 40.06"</u>	Longitude	<u>-79° 17' 6.87"</u>
Quad Name	<u>Tylersburg</u>	Quad Code	<u>0711</u>
Wastewater Description: <u>IW Process Effluent with ELG</u>			
Receiving Waters	<u>Unnamed Tributary to Walley Run</u>	Stream Code	<u>54963</u>
NHD Com ID	<u>100475939</u>	RMI	<u>0.76</u>
Drainage Area	<u>0.12</u>	Yield (cfs/mi ²)	<u>0 (dry); 0.1255 (perennial)</u>
Q ₇₋₁₀ Flow (cfs)	<u>0 (dry); 0.35642 (perennial)</u>	Q ₇₋₁₀ Basis	<u>USGS #03011800</u>
Elevation (ft)	<u>1640</u>	Slope (ft/ft)	<u>0.0529</u>
Watershed No.	<u>16-F</u>	Chapter 93 Class.	<u>CWF</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>METALS</u>		
Source(s) of Impairment	<u>ACID MINE DRAINAGE</u>		
TMDL Status	<u>Final</u>	Name	<u>Walley Run Watershed</u>
Background/Ambient Data		Data Source	
pH (SU)	<u>6.1</u>		<u>2007 TRE Study for Nickel</u>
Temperature (°C)	<u>20</u>		<u>Default (CWF)</u>
Hardness (mg/L)	<u>55</u>		<u>1987 Stream Survey by the Department</u>
Other:	<u></u>		<u></u>
Nearest Downstream Public Water Supply Intake	<u>Aqua Pennsylvania, Inc. - Emlenton</u>		
PWS Waters	<u>Allegheny River</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u>75</u>

Comments: No limits were deemed necessary for TDS, sulfates, and phenolics due to the significant dilution available prior to the nearest downstream public water supply. No modeling of the above parameters was done.

Other Comments: Stormwater Outfalls 002-005 also discharge to this same tributary, locally known as Liard Run.

Treatment Facility Summary				
Treatment Facility Name: County Landfill Inc.				
WQM Permit No.		Issuance Date		
1694201 A-3		7/05/2013		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Chemical (Industrial Waste)	Chemical Precipitation	Ultraviolet	
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0288	N/A		Combination	Landfill

Changes Since Last Permit Issuance:

Other Comments:

Development of Effluent Limitations

Outfall No. 001 Design Flow (MGD) 0.012
 Latitude 41° 23' 40.06" Longitude -79° 17' 6.87"
 Wastewater Description: Treated municipal landfill leachate

Technology-Based Limitations

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

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
BOD ₅	37	Average Monthly	40 CFR 445.21	
BOD ₅	140	Daily Maximum	40 CFR 445.21	
TSS	27	Average Monthly	40 CFR 445.21	
TSS	88	Daily Maximum	40 CFR 445.21	
NH ₃ -N	4.9	Average Monthly	40 CFR 445.21	
NH ₃ -N	10	Daily Maximum	40 CFR 445.21	
A-Terpineol	0.016	Average Monthly	40 CFR 445.21	
A-Terpineol	0.033	Daily Maximum	40 CFR 445.21	
Benzoic Acid	0.071	Average Monthly	40 CFR 445.21	
Benzoic Acid	0.12	Daily Maximum	40 CFR 445.21	
p-Cresol	0.014	Average Monthly	40 CFR 445.21	
p-Cresol	0.025	Daily Maximum	40 CFR 445.21	
Phenol	0.015	Average Monthly	40 CFR 445.21	
Phenol	0.026	Daily Maximum	40 CFR 445.21	
Zinc	0.11	Average Monthly	40 CFR 445.21	
Zinc	0.20	Daily Maximum	40 CFR 445.21	
pH	6-9 (S.U.)	Minimum-Maximum	40 CFR 445.21	Chapter 93.7
Oil & Grease	15	Average Monthly		Chapter 95.2
Total Aluminum	0.025 (lbs/day)	Average Monthly	Walley Run Watershed TMDL	
Total Aluminum	0.05 (lbs/day)	Daily Maximum	Walley Run Watershed TMDL	
Total Manganese	0.092 (lbs/day)	Average Monthly	Walley Run Watershed TMDL	
Total Manganese	0.183 (lbs/day)	Daily Maximum	Walley Run Watershed TMDL	
Total Iron	0.321 (lbs/day)	Average Monthly	Walley Run Watershed TMDL	
Total Iron	0.462 (lbs/day)	Daily Maximum	Walley Run Watershed TMDL	
Fecal Coliform (5/01 - 9/30)	200/100 ml	Geometric Mean		Chapter 93.7
Fecal Coliform (10/01 - 4/30)	2000/100 ml	Geometric Mean		Chapter 93.7
Dissolved Iron	7.0	IMAX		Chapter 95.2(4)

Comments:

Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment A) determined the following parameters were candidates for limitations: Total dissolved solids, total antimony, total arsenic, total boron, total cobalt, total copper, total iron, dissolved iron, total nickel, total thallium, and bis(2-ethylhexyl) phthalate.

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

Parameter	Limit (mg/l)	SBC	Model
Arsenic, Total	0.2	Average Monthly	PENTOXSD Version 2.0d
Arsenic, Total	0.4	Daily Maximum	PENTOXSD Version 2.0d
Copper, Total	0.12	Average Monthly	PENTOXSD Version 2.0d
Copper, Total	0.24	Daily Maximum	PENTOXSD Version 2.0d
Iron, Dissolved	6.0	Average Monthly	PENTOXSD Version 2.0d
Iron, Dissolved	7.0	Daily Maximum	PENTOXSD Version 2.0d
Thallium, Total	0.0048	Average Monthly	PENTOXSD Version 2.0d
Thallium, Total	0.0096	Daily Maximum	PENTOXSD Version 2.0d

Comments: Daily maximum limits are derived using a multiplier of “2” with exception of dissolved iron, which is set the same as the technology-based limit due it being less than two times the average monthly limit.

Analytical data from the 2014 renewal application was evaluated for this renewal due to the facility not treating leachate onsite for the last few years.

The Toxic Screening Analysis Spreadsheet recommended monitoring for total boron, total cobalt, total iron, and total nickel. Only total nickel and total iron monitoring will be placed in the proposed renewed permit. The Department decided not to put monitoring for total boron or total cobalt in the permit because total boron application data was over five times less than the calculated WQBEL and total cobalt application data was over eight times less than the calculated limit.

Best Professional Judgment (BPJ) Limitations

Comments: N/A

Anti-Backsliding

N/A

Other Considerations

Stormwater runoff from the site is not considered to be “stormwater associated with industrial activity” due to the landfill being capped and being certified as officially closed. Therefore, no effluent limits monitoring requirements were placed in the permit for the stormwater outfalls (002-005). A special condition in Part C of the permit, which relates to stormwater, will be retained.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	Continuous	Measured
BOD5	Report	Report	XXX	37.0	140.0	140	2/month	24-Hr Composite
TSS	Report	Report	XXX	27.0	88.0	88	2/month	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15.0	XXX	30	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	XXX	1/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/month	Grab
Ammonia	Report	Report	XXX	4.9	10.0	12.3	2/month	24-Hr Composite
Total Aluminum	0.025	0.05	XXX	Report Daily Max	XXX	XXX	1/month	24-Hr Composite
Total Arsenic	0.02	0.04	XXX	0.20	0.40	0.5	2/month	24-Hr Composite
Total Copper	0.012	0.024	XXX	0.12	0.24	0.3	1/month	24-Hr Composite
Dissolved Iron	0.60	0.70	XXX	6.0	7.0	7	1/month	24-Hr Composite
Total Iron	0.321	0.462	XXX	Report Daily Max	XXX	XXX	1/month	24-Hr Composite
Total Manganese	0.092	0.183	XXX	Report Daily Max	XXX	XXX	1/month	24-Hr Composite

Outfall 001 , Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nickel	XXX	Report	XXX	XXX	Report	XXX	1/month	24-Hr Composite
Total Thallium	0.00048	0.00096	XXX	0.0048	0.0096	0.012	1/month	24-Hr Composite
Total Zinc	Report	Report	XXX	0.11	0.2	0.28	1/month	24-Hr Composite
Phenol	Report	Report	XXX	0.015	0.026	0.038	1/month	24-Hr Composite
a-Terpineol	Report	Report	XXX	0.016	0.033	0.04	1/month	24-Hr Composite
Benzoic Acid	Report	Report	XXX	0.071	0.12	0.18	1/month	24-Hr Composite
p-Cresol	Report	Report	XXX	0.014	0.025	0.035	1/month	24-Hr Composite

Compliance Sampling Location: Outfall 001 (prior to mixing with any other waters)

Other Comments:

ATTACHMENT A



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Figure 1 - Toxic Screening Analysis



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Figure 2 - PENTOXSD Modeling



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Figure 3 - WQM 7.0 Modeling