March 17, 2025

Mary Klemesrud
Iowa Department of Natural Resources
6200 Park Avenue Suite 200
Des Moines, Iowa 50321

HLW Engineering Group
Engineering Management

RE: 2025 FINANCIAL ASSURANCE
TAMA COUNTY SANITARY LANDFILL
IDNR PERMIT NO. 86-SDP-01-72P
HLW PN 6029-23A.360

Dear Ms Klemesrud:

Included with this letter is financial assurance documentation for 2025 for the Tama County Sanitary Landfill.

Documentation submitted with this letter includes the following:

1. Certified copy of the Closure/Postclosure Cost Estimate
2. Signed "Municipal Solid Waste Sanitary Landfill Financial Assurance Report Form"

The audit for the Tama County Solid Waste Disposal Commission has been filed with the State Auditor and is available on the State Auditor's website.

Note that cost estimates have been calculated using actual costs; therefore, adjustments for inflation were determined not to be applicable to the 2025 Closure/Postclosure Cost Estimate.

Please contact me if you have any questions.

Respectfully submitted,
HLW Engineering Group

Douglas J. Luzbetak, P.E.
Project Manager

cc: Dave Sherwood, Landfill Administrator, Tama County SLF (electronic copy)

Authority

The following calculations are based on rules published in 567 IAC Chapter 113.14, "Municipal solid waste landfill financial assurance". This analysis is based on assuming a worst case scenario regarding closure of the landfill and assuming all work associated with closure/postclosure is performed by a third party (i.e., not by landfill staff), as per Regulations. **Note that costs are based on actual costs and therefore adjustments for inflation were determined not to be applicable in this closure/postclosure cost estimate.**

Landfill Areas

The active area at the Tama County SLF is the Subtitle D compliant horizontal expansion area which consists of three phases. The worst case scenario for closure is to immediately close the active portions of the landfill. The landfill is divided into the following areas:

Original Landfill Area (closed)	18.5 acres
Phase 1 (Alternative Liner)	3.0 acres
Phase 2 (Composite Liner)	4.0 acres
Phase 3 (Composite Liner)	4.7 acres

The Original Landfill Area has been closed and need not be considered in a closure cost estimate. Approximately 0.5 acre of the Original Landfill Area was covered with a Subtitle D composite abutment liner during the Phase 2 Expansion project in 2010 and approximately 1.4 acres of the Original Landfill Area was covered with a Subtitle D composite abutment liner during the Phase 3 Expansion project in 2017. The composite lined areas are required to be closed with a composite cap and will be added to the closure/postclosure areas for closure with a composite FML cap. The construction of abutment lined areas in the future will cause additional portions of areas that are closed to be shifted to active in future Financial Assurance Calculations.

Closure Costs - Soil Cap

Closure costs for the Subtitle D compliant Alternative Lined horizontal expansion Phase 1 (3.0 total acres) include constructing the infiltration layer, geonet drainage layer, vegetative layer, erosion and surface water control structures, and seeding. Estimated quantities and prices for the closure of this area is as follows:

Infiltration Layer	9,680 yd^3	\$4.00 /yd^3	\$38,700
Geonet Drainage Layer	14,520 yd^2	\$6.25 /yd^2	\$90,800
Erosion Layer	9,680 yd^3	\$3.50 /yd^3	\$33,900
Seeding and Mulching	3.0 acre	\$2,500 /acre	\$7,500
Erosion Control Structures	3.0 acre	\$1,000 /acre	\$3,000
	Total Construction Cost		\$173,900

Closure Costs - Composite Cap

Closure costs for the Subtitle D compliant Composite Lined horizontal expansion Phases 2 and 3 (8.7 total acres) include cost of constructing the composite FML cap, erosion and surface water control structures, and seeding. Estimated quantities and prices for the closure of these areas are as follows:

Composite Cap	8.7 acres	$139,800 /acre	$1,216,300
(for derivation of cost, see Attachment A)			
Seeding and Mulching	8.7 acres	$2,500 /acre	$21,800
Erosion Control Structures	8.7 acres	$1,000 /acre	$8,700
		Total Construction Cost	$1,246,800

Total Construction Cost - Alternative and Composite Cap	$1,420,700
Add 10% for mobilization/contingency based on construction cost	$142,100
Engineering fees for design, bid process, and administration	$42,600
Engineering fees for staking, inspection, and testing	$63,900
Total Closure Cost	$1,669,300

Postclosure Cost Estimate

Note: Postclosure costs in this estimate will be broken out into costs attributed to the Original Landfill Area and costs attributed to the Horizontal Expansion Area as much as possible.

Postclosure costs include any costs anticipated during the postclosure period, based upon current landfill operations and current IDNR regulations. All of the waste deposition areas previously mentioned require postclosure care and are included in this analysis. The area needing postclosure care in the Original Landfill Area is approximately 16.6 acres (18.5 acres - 0.5 acres - 1.4 acres). The area needing postclosure care in the Horizontal Expansion Area is approximately 11.7 acres (3.0 acres - soil cap and 8.7 acres - FML cap). Total area is 28.3 acres.

The soil cap, FML cap, erosion control structures, seeding, etc. must be maintained during the postclosure period. Costs associated with this maintenance are estimated to be:

Maintenance/Repair Soil Cap	19.6 acres	$50 /acre	$1,000
Maintenance/Repair FML Cap	8.7 acres	$100 /acre	$900
Reseeding (2% of area annually)	0.6 acres	$1,200 /acre	$700
Maintenance of Erosion Control	28.3 acres	$50 /acre	$1,400
Mowing	28.3 acres	$50 /acre	$1,400
			$5,400

Based on the ratio of the Original Landfill Area to the Horizontal Expansion Area and the difference in cap repair costs for soil vs. FML caps, attribute these costs as follows:

OL	$2,900
HE	$2,500

Groundwater quality reporting, monitoring well sampling, and monitoring well testing will be continued throughout the postclosure period. Assume these will be of the type and method as at present time. Costs associated with groundwater quality reporting, monitoring well sampling, and monitoring well testing are:

An Annual Groundwater Quality Report and Semi Annual Notification are required.

Semi-Annual Notification and Annual Report - (combined)			$5,100
		OL	$2,550
		HE	$2,550

Explosive gas monitoring is required quarterly.

Gas monitoring	$500 each	4 per year	$2,000
		OL	$1,000
		HE	$1,000

Monitoring Well Sampling and Testing

Assume monitoring well sampling and testing will be as per the current HMSP. The monitoring well system is approximately split between the Original Landfill Area and the Horizontal Expansion Area. Estimated testing costs are as follows:

April*	14 tests	$300 /test	$4,200
October*	14 tests	$300 /test	$4,200

* 13 sampling points and 1 duplicate

Sampling costs are:

April	$2,500
October	$2,500
Total, Monitoring Well Sampling and Testing	$13,400
OL	$6,700
HE	$6,700

As per INDR regulations, monitoring wells at the SLF are to be re-evaluated every 2 years. The cost of the re-evaluation is included in the monitoring well sampling and annual reporting costs.

The postclosure costs and an Audit must be completed annually as a basis for Financial Assurance.

Financial Assurance costs		$4,500
	OL	$2,250
	HE	$2,250

Assume leachate will continue to be collected in the same manner during the postclosure period as it is now. Leachate is currently stored on site in a Subtitle D composite lined leachate storage lagoon with a capacity of 1,000,000 gallons. Leachate is then either recirculated over the Phase 2 and 3 liner or hauled to the City of Toledo POTW for treatment. For these calculations assume all leachate will be hauled to the POTW for treatment during the postclosure period. Between 2008 and 2012, the site averaged hauling approximately 710,000 gallons of leachate per year for treatment; therefore for consistency with past financial assurance calculations, use 710,000 gallons as a "typical" year. HELP model analysis for the Subtitle D expansion areas indicate that the peak daily leachate generation rate will fall to less than 1 gpd/acre after closure; however, leachate is also generated in the Original Landfill area (collected in the leachate cutoff pipe) and the groundwater diversion system under Phases 1, 2, and 3 has also been connected to the leachate collection system. Assume that the leachate cutoff pipe and groundwater diversion system contribute approximately 50% of the "typical year" volume of leachate and assume that they will continue this contribution during the postclosure period. Therefore, total annual leachate generation expected during postclosure is:

355,000 gal/yr (groundwater diversion system and leachate cutoff pipe)
+ 4,270 gal/yr (Subtitle D lined area) = 359,300 gallons/year

Assume annual electrical costs to run pump stations and loadout = $500

Assume leachate hauling costs are $120/load and each load during postclosure is approximately 6,000 gallons.

60 trips $120 /trip $7,200

Assume leachate treatment charges at the City of Toledo POTW will be $0.03/gallon during postclosure.

359,300 gallons $0.030 /gallon $10,700

Leachate will be tested periodically for discharge to the City of Toledo POTW. Assume leachate testing/sampling costs are $1,500 annually.

Leachate testing/sampling costs:

Testing/sampling $1,500

There needs to be a cost for maintaining the leachate system during the postclosure period. Costs are anticipated to be maintenance on the pumps, truck load out, leachate storage lagoon, etc.

Annual maintenance of leachate system $2,200

Total yearly cost of leachate system:

Electricity	$500
Leachate Hauling	$7,200
Treatment Charges	$10,700
Testing	$1,500
Maintenance	$2,200
	$22,100

Assume costs will be split evenly between the Original Landfill Area and the Horizontal Expansion Area.

Adjusted annual cost of leachate system:

Original Landfill Area	$11,050
Horizontal Expansion Area	$11,050

As per IDNR regulations, the leachate collection system is to be cleaned once every three years. Cost of cleaning every 3 years is estimated to be:

$4,800 Annual Equivalent Cost is $ 1,600

Cleaning collection system costs should all be attributed to the Subtitle D compliant lined areas.

Financial Assurance Calculations

Closure **TOTAL** $1,669,300

Postclosure -Original Landfill Area (annual)

Maintenance of cap, erosion control, etc.	$2,900
Water Quality Reporting	$2,550
Explosive Gas Monitoring	$1,000
Monitoring Well Sampling and Testing	$6,700
Financial Assurance	$2,250
Leachate Treatment, Testing, etc.	$11,050
	$26,450

Estimated Postclosure Costs - Original Landfill Area

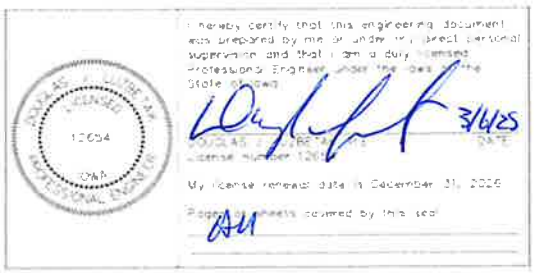
$26,450 /year 30 years $ 793,500

Postclosure -Horizontal Expansion Area (annual)

Maintenance of cap, erosion control, etc.	$2,500
Water Quality Reporting	$2,550
Explosive Gas Monitoring	$1,000
Monitoring Well Sampling and Testing	$6,700
Financial Assurance	$2,250
Leachate Treatment, Testing, etc.	$11,050
Cleaning Collection System (annual cost)	$1,600
	$27,650

Estimated Postclosure Costs - Horizontal Expansion Area

$27,650 /year 30 years $ 829,500



ATTACHMENT A

OPINION OF PROBABLE COST
TAMA COUNTY SLF
FML COMPOSITE CAP, cost per acre
HLW PN 6029-23A.360
March 3, 2025

Item	Quantity	Unit	Unit Price	Amount
Surface Preparation	4,840	Sq. Yd.	$0.50	$2,420.00
Gas Collection Layer	1,400	Tons	$15.75	$22,050.00
4" Perforated Gas Collection Piping	600	Lin. Ft.	$20.00	$12,000.00
Gas Vents	1	Each	$3,500.00	$3,500.00
Geotextile Separation Layer (3)	14,520	Sq. Yd.	$1.50	$21,780.00
Compacted Clay Cap (1.5' thick)	2,420	Cu. Yd.	$4.00	$9,680.00
Flexible Membrane Liner	4,840	Sq. Yd.	$6.25	$30,250.00
Drainage Layer/Biotic Barrier	1,700	Tons	$15.75	$26,775.00
Vegetative Layer (2' thick)	3,230	Cu. Yd.	$3.50	$11,305.00
			Total Construction Cost	$139,760.00

Municipal Solid Waste Sanitary Landfill
Financial Assurance Report Form

SECTION 1: FACILITY INFORMATION

(please print or type)

Information Requested

Facility Name: Tama County Sanitary Landfill Permit Number: 86-SDP-01-72P

Permitted Agency/Entity: Tama County Solid Waste Disposal Commission

SECTION 2: CLOSURE/POSTCLOSURE OR CORRECTIVE ACTION COST ESTIMATES

Information Requested	Cost Estimate	Date of Cost Estimate
Updated Closure Cost Estimate	$1,669,300	March 6, 2025
Updated Postclosure Cost Estimate	$1,623,000	March 6, 2025
Initial or Updated Corrective Action Cost Estimate	Not Applicable	Not Applicable

*Attach closure/postclosure cost estimate(s) signed and certified by an Iowa-licensed professional engineer. Cost estimates shall include, at a minimum, each of the cost line items defined in 113.14(3)"c" for closure and 113.14(4)"c" for postclosure. Please provide closure and/or postclosure site area acreage information with the estimates.

Provide a cost estimate for corrective action only if corrective action is required and a corrective action plan has been approved by the Department. Attach the corrective action cost estimate signed and certified by an Iowa-licensed professional engineer. The cost estimate shall account for total costs of the activities described in the approved corrective action plan for the corrective action period.

SECTION 3: FACILITY WASTE TONNAGE INFORMATION

Information Requested	Tons
Remaining permitted capacity as of the beginning of permit holder's current fiscal year	131,469
Amount of waste disposed of at the facility during the prior year	18,322

SECTION 4: PROOF OF COMPLIANCE

Publicly Owned Municipal Solid Waste Landfills *(ATTACH AUDIT REPORT)*

Owner's Most Recent Annual Audit Report

Prepared by: Bowman and Miller, PC

For fiscal year ending: June 30, 2024

Privately Owned Municipal Solid Waste Landfills *(ATTACH AFFIDAVIT)*

Attach owner/operator's affidavit indicating that an annual review has been performed by a certified public accountant to determine whether the privately owned landfill is in compliance with IAC 567 Chapter 113. The affidavit shall state the name of the certified public accountant, the dates and conclusions of the review, and the steps taken to rectify any deficiencies identified by the accountant.

SECTION 5: FINANCIAL ASSURANCE INSTRUMENT

Type and Value of Financial Assurance Instrument(s) *(ATTACH INSTRUMENT(S))*

Assurance Instrument	Establishment Date	Mechanism Covers	Instrument Value*
Trust Fund 567 IAC 113.14(6)"a"		Closure ☐ Postclosure ☐ Corrective Action ☐	$
Surety Bond 567 IAC 113.14(6)"b"		Closure ☐ Postclosure ☐ Corrective Action ☐	$
Letter of Credit 567 IAC 113.14(6)"c"		Closure ☐ Postclosure ☐ Corrective Action ☐	$
Insurance 567 IAC 113.14(6)"d"		Closure ☐ Postclosure ☐ Corrective Action ☐	$
Corporate Financial Test 567 IAC 113.14(6)"e"		Closure ☐ Postclosure ☐ Corrective Action ☐	$
Local Gov't. Financial Test 567 IAC 113.14(6)"f"		Closure ☐ Postclosure ☐ Corrective Action ☐	$
Corporate Guarantee 567 IAC 113.14(6)"g"		Closure ☐ Postclosure ☐ Corrective Action ☐	$
Local Gov't Guarantee 567 IAC 113.14(6)"h"		Closure ☐ Postclosure ☐ Corrective Action ☐	$
Local Gov't. Dedicated Fund 567 IAC 113.14(6)"i"	April 1997	Closure ☒ Postclosure ☒ Corrective Action ☐	$ 2,876,359

*Pursuant to IAC 567 113.14(9), if account(s) are restricted/reserved to pay for closure, postclosure or corrective action costs, then the amount of the financial assurance instrument may be reduced by the sum of the cash balance of the account(s) established to comply with subrule 113.14(8).

SECTION 6: INITIAL PROOF OF ESTABLISHMENT OF ACCOUNTS

Check Which Applies: ☐ New Mechanism ☒ Previously Submitted

Pursuant to IAC 567 Chapter 113.14(8)"f", documentation of the establishment of accounts is to be submitted to the department by April 1, 2003 for currently permitted MSWLFs. Permit holders for MSWLFs permitted after April 1, 2003, shall submit documentation of the establishment of accounts prior to the MSWLF's initial receipt of waste.

Please attach documentation indicating accounts/fund have been established for closure and postclosure care and if the account(s) are restricted/reserved for closure or postclosure care. Examples of documentation include bank statements for closure/postclosure accounts, letter signed by the chief financial officer, letter from certified public accountant, etc.

Accounts established pursuant to paragraph 113.14(6)"a" for trust funds or paragraph 113.14(6)"i" for local government dedicated funds also satisfies the requirements of this subrule, and the permit holder shall not be required to establish additional closure and postclosure accounts.

SECTION 7: CLOSURE AND POSTCLOSURE ACCOUNTS

Completion of the following closure and postclosure account information complies with the annual financial statement requirements of IAC 567 113.14(3)"a" and 113.14(4)"a" by indicating the current balance(s) of the closure/postclosure account(s) or dedicated/trust fund and the projected amount(s) to be deposited in the account(s).

Under "Beginning Balance", please state the account/fund balance 30 days after the start of the previous fiscal year, for "Ending Balance", indicate the account balance 30 days after the close of the previous fiscal year, and for "Projected Deposit", indicate the amount to be deposited within 30 days of the close of the permit holder's fiscal year.

Information Requested	Beginning Balance	Ending Balance	Projected Deposit
Closure Account Balance *(see formula below)*	$	$	$
Postclosure Account Balance *(see formula below)*	$	$	$
Or			
Dedicated Fund Balance *(see formula below)*	$ 2,752,912	$ 2,876,359	$ 138,647
Trust Fund Balance *(see formula below)*	$	$	$

Formula for Projected Deposits

Closure or Postclosure Account

$$\frac{CE - CB}{RPC} \times TR$$

Where "CE" is the closure or postclosure cost estimate, "CB" is the balance 30 days after close of the previous fiscal year, "RPC" is the remaining permitted capacity in tons, of the landfill from the beginning of the current fiscal year, and "TR" is the total number of tons of solid waste disposed in the prior year.

Dedicated/Trust Fund

$$\frac{CE - CB}{Y}$$

Where "CE" is the closure or postclosure cost estimate, "CB" is the balance 30 days after close of the previous fiscal year, and "Y" is number of years remaining in the pay-in period.

If needed, the space below can be used to show calculations for projected deposits

CE (Closure and Postclosure) = $3,292,300
CB (Closure and Postclosure) = $2,876,359

Due to the construction of Phase 3, a 10 year dedicated fund pay in period was used in the 2018 Financial Assurance calculations. Based on this, a dedicated fund pay in period of 3 years is used in the 2025 calculations.

Projected Deposit
=($3,292,300-$2,876,359)/3 years
= $138,647

SECTION 8: PERMIT HOLDER ENDORSEMENT

Submittal of this completed and endorsed form along with all required documentation establishes Notification and Proof of Permit Holder Compliance with IAC 567 Chapter 113.

Name of Official: Linn Snell Title: Chair

Agency/Entity: Tama County Solid Waste Disposal Commission

Address: PO Box 31

City: Toledo State: IA Zip: 52342

Telephone: 641-484-3341 Fax:

Email Address: landfill@tamacounty.org

Signature of Official: Linn R. Snell Chairman Date: March 13th 2022

Questions? Contact Bill Blum at (515) 240-6048 or Bill.Blum@dnr.iowa.gov