

March 19, 2025

Mary Klemesrud  
Program Planner 3  
IDNR – Land Quality Bureau  
6200 Park Avenue Suite 200  
Des Moines, Iowa 50321



**RE: 2025 FINANCIAL ASSURANCE  
SOUTH CENTRAL IOWA SANITARY LANDFILL  
IDNR PERMIT NO. 61-SDP-01-78P  
HLW PN 6022-23A.360**

Dear Ms Klemesrud:


Included with this letter is financial assurance documentation for 2025 for the South Central Iowa Sanitary Landfill. Documentation included with this letter includes a certified copy of the Closure/Postclosure Cost Estimate and the signed "Municipal Solid Waste Sanitary Landfill Financial Assurance Report Form".

The audit for Fiscal Year 2024 for the South Central Iowa Landfill Agency (SCILA) 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, LLC**

  
Douglas J. Luzbetak, P.E.  
Project Manager

cc: Marcia Beeler, Manager, South Central Iowa 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. **Estimated costs are based on actual costs and therefore adjustments for inflation were determined to not be applicable in this closure/postclosure cost estimate.**

The South Central Iowa SLF started landfilling in a Subtitle D compliant horizontal expansion area in 2007. Landfilling ceased in the Original Landfilling Area, which is unlined, prior to October 1, 2007.

The Original Landfilling Area is approximately 28 acres in size. Approximately 3 acres were covered with a Subtitle D compliant composite abutment liner in 2007 and 1.8 acres were covered with a Subtitle D compliant abutment liner in 2018. The areas with the abutment liner require closure with a composite cap and are included in the closure costs for Cells 1, 2, 3, 4, and 5. The remainder of the Original Landfilling Area has been closed in accordance with the Closure/Postclosure Plan.

For the closure/postclosure cost estimates below, an attempt is made to separate costs attributed to the Original Landfilling Area from costs attributed to the Horizontal Expansion Area.

**Closure Cost Estimate**

The Original Landfilling Area has been closed in accordance with the Closure/Postclosure Plan.

Cells 1, 2, 3, 4, 5 and Phase 1, Cells A&B have been constructed with Subtitle D composite liners. Closure costs for the Subtitle D lined areas include cost of constructing the composite FML cap, erosion and surface water control structures, and seeding. Estimated quantities and prices for the closure of the Subtitle D lined areas are as follows:

Composite Cap	27.3 acres	\$136,700 /acre	\$3,731,900
(for derivation of cost, see Attachment A)			
Seeding and Mulching	27.3 acres	\$2,500 /acre	\$68,300
Erosion Control Structures	27.3 acres	\$1,000 /acre	\$27,300
Total Construction Cost			<u>\$3,827,500</u>
Add 10% of construction cost for mobilization/contingency			\$382,800
Engineering fees for design, bid process, and administration			\$76,600
Engineering fees for staking, inspection, and testing			<u>\$95,700</u>
Total Closure Cost			<u>\$4,382,600</u>

**Postclosure Cost Estimate**

Postclosure costs include any costs anticipated during the 30-year postclosure period, based upon current landfill operations and current IDNR regulations. The area needing postclosure care associated with the Original Landfilling Area (OL) is approximately 23.2 acres. The area that will need postclosure care in the Horizontal Expansion Area (HE) is approximately 27.3 acres. The soil cap, erosion control structures, vegetation, etc. must be maintained during the postclosure period. Costs associated with this maintenance are:

Maintenance/Repair Soil Cap	23.2 acres	\$50 /acre	\$1,200
Maintenance/Repair FML Cap	27.3 acres	\$100 /acre	\$2,700
Reseeding (2% of area annually)	1.0 acres	\$1,200 /acre	\$1,200
Maintenance of Erosion Control	50.5 acres	\$50 /acre	\$2,500
Mowing	50.5 acres	\$10 /acre	\$500
			\$8,100

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

OL	\$3,100
HE	\$5,000

Groundwater quality reporting, monitoring well sampling, and monitoring well testing will be continued throughout the postclosure period. Since these services cover both the Original Landfilling Area and the Horizontal Expansion Area, split these costs equally between the two areas. Costs associated with reporting, monitoring well sampling, and monitoring well testing are:

An Annual Water Quality Report and Semi Annual notification are required.

Water Quality Reporting	\$4,600		\$4,600
		OL	\$2,300
		HE	\$2,300

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 will be as per Chapter 113 regulations.  
 Estimated testing costs during postclosure are as follows:

April*	22 tests	\$300 /test	\$6,600
October*	22 tests	\$300 /test	\$6,600

\* Assume there will be 21 sampling points and 1 duplicate

Sampling costs are:

April	\$2,150
October	<u>\$2,150</u>
	<u>\$17,500</u>
OL	<u>\$8,800</u>
HE	<u>\$8,700</u>

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

Financial Assurance documentation	<u>\$3,200</u>
OL	<u>\$1,600</u>
HE	<u>\$1,600</u>

Leachate is stored in two Subtitle D compliant lagoons with a total capacity in excess of 1.6 million gallons. The majority of leachate is recirculated into the waste mass in the Subtitle D composite lined area. Leachate is also hauled to the Des Moines Metropolitan Wastewater Reclamation Facility for treatment and disposal when needed. Assume leachate will be collected and hauled off site for treatment during the postclosure period.

Extraction well LW-1E was installed in the Original Landfilling Area in 1994. Two laterals were installed along the west side of the Original Landfilling Area in 1999 to collect leachate. Modifications to the laterals were made in 2001/2002. The leachate collection system installed in the Original Landfilling Area has collected a minimal volume of leachate to date.

Leachate collection was installed in the Horizontal Expansion Area during initial construction in 2007. This system was extended into the Subtitle D compliant cells constructed in 2011, 2016, 2018, and 2023.

Five leachate extraction wells were installed in the Original Landfilling Area in December, 2010. A sixth leachate extraction well was installed in 2015. Leachate conveyance piping has been run to the wells and dedicated pumps have been installed in each well to extract leachate. Pitless adaptors were installed in the wells in 2015 to allow year round operation of the system.

Previous calculations assumed a leachate generation rate from the 1994 and 1999 infrastructure of 100 gallons per day, which equates to a generation rate of 36,500 gallons/year. Based on field observations this is an overestimate of the contributions from this area. HELP model analysis indicates that the peak daily leachate generation rate from the Horizontal Expansion Area will fall to less than 1 gpd/acre upon closure. This results in an estimated leachate generation rate during postclosure from Subtitle D lined areas of approximately 10,000 gallons/year. Since leachate generation from the three collection systems is unknown, assume a constant leachate generation rate of 50,000/year from the existing leachate collection systems for this and subsequent calculations.

Due to the capacity of the leachate storage lagoons, which is considerably larger than the leachate generation rate expected during postclosure, leachate will most likely not be hauled for treatment on an annual basis - assume half of the anticipated leachate generated annually will be hauled for treatment (25,000 gallons/year).

Assume electricity cost to run extraction wells and pump stations:	\$300
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Assume leachate hauling, treatment and testing costs are \$0.27/gallon	
25,000 gallons      \$0.270 /gallon	\$6,800

Cost for maintaining the leachate system during the postclosure period is needed. Costs are anticipated to be maintenance on the pumps, extraction wells, and lagoons.

Annual maintenance of leachate system	\$2,000
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Total yearly cost of leachate system:

Electricity	\$300
Treatment/testing	\$6,800
Maintenance	\$2,000
	\$9,100

Leachate costs need to be split between the Original Landfilling Area and the Horizontal Expansion Area. Based on anticipated leachate generation volumes discussed above, assume that approximately 70% of the leachate generated (and 70% of the cost) during post closure is attributed to the Original Landfilling Area and 30% of the leachate generated (and 30% of the cost) is attributed to the Horizontal Expansion Area.

Adjusted yearly cost of leachate system:

Original Landfilling Area	\$6,400
Horizontal Expansion Area	\$2,700

As per IDNR regulations, the leachate collection system is to be cleaned once every three years. Estimated cost of cleaning leachate collection system is \$4,800 every three years. Attribute costs 10% to the Original Landfilling Area and 90% to the Horizontal Expansion Area.

\$4,800	Annual Equivalent Cost is	\$1,600
	OL	\$160
	HE	\$1,440

**Financial Assurance Calculations**

**Closure**

Horizontal Expansion Area	<u>\$4,382,600</u>
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**Postclosure - Original Landfilling Area (annual)**

Maintenance of cap, erosion control, etc.	\$3,100
Groundwater Reporting	\$2,300
Explosive Gas Monitoring	\$1,000
Monitoring Well Sampling and Testing	\$8,800
Financial Assurance Documentation	\$1,600
Leachate Treatment, Testing, etc.	\$6,400
Cleaning Collection System (annual cost)	\$160
	<u>\$23,360</u>

Total estimated cost during 30 yr postclosure period - Original Landfilling Area	<u>\$700,800</u>
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**Postclosure - Horizontal Expansion Area (annual)**

Maintenance of cap, erosion control, etc.	\$5,000
Groundwater Reporting	\$2,300
Explosive Gas Monitoring	\$1,000
Monitoring Well Sampling and Testing	\$8,700
Financial Assurance Documentation	\$1,600
Leachate Treatment, Testing, etc.	\$2,700
Cleaning Collection System (annual cost)	\$1,440
	<u>\$22,740</u>

Total estimated cost during 30 yr postclosure period - Horizontal Exp. Area	<u>\$682,200</u>
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## ATTACHMENT A

OPINION OF PROBABLE COST  
 SCILA SLF  
 FML COMPOSITE CAP, cost per acre  
 HLW PN 6022-23A.360  
 February 4, 2025

<b>Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Amount</b>
Surface Preparation	4,840	Sq. Yd.	\$0.50	\$2,420.00
Gas Collection Layer	1,400	Tons	\$15.25	\$21,350.00
4" Perforated Gas Collection Piping	600	Lin. Ft.	\$17.50	\$10,500.00
Gas Flares	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	\$15.25	\$25,925.00
Vegetative Layer (2' thick)	3,230	Cu. Yd.	\$3.50	\$11,305.00
Total Construction Cost				\$136,710.00





# Municipal Solid Waste Sanitary Landfill Financial Assurance Report Form

## SECTION 1: FACILITY INFORMATION

(please print or type)

### Information Requested

Facility Name: South Central Iowa Sanitary Landfill Permit Number: 61-SDP-01-78P  
Permitted Agency/Entity: South Central Iowa Landfill Agency

## SECTION 2: CLOSURE/POSTCLOSURE OR CORRECTIVE ACTION COST ESTIMATES

Information Requested	Cost Estimate	Date of Cost Estimate
Updated Closure Cost Estimate	\$4,382,600	February 4, 2025
Updated Postclosure Cost Estimate	\$1,383,000	February 4, 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	209,845
Amount of waste disposed of at the facility during the prior year	53,735

## SECTION 4: PROOF OF COMPLIANCE

### Publicly Owned Municipal Solid Waste Landfills

(ATTACH AUDIT REPORT)

Owner's Most Recent Annual Audit Report

Prepared by: Roof, Gerdes, Erlbacher, PLC

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 <input type="checkbox"/> Postclosure <input type="checkbox"/> Corrective Action <input type="checkbox"/>	\$
Surety Bond 567 IAC 113.14(6)“b”		Closure <input type="checkbox"/> Postclosure <input type="checkbox"/> Corrective Action <input type="checkbox"/>	\$
Letter of Credit 567 IAC 113.14(6)“c”		Closure <input type="checkbox"/> Postclosure <input type="checkbox"/> Corrective Action <input type="checkbox"/>	\$
Insurance 567 IAC 113.14(6)“d”		Closure <input type="checkbox"/> Postclosure <input type="checkbox"/> Corrective Action <input type="checkbox"/>	\$
Corporate Financial Test 567 IAC 113.14(6)“e”		Closure <input type="checkbox"/> Postclosure <input type="checkbox"/> Corrective Action <input type="checkbox"/>	\$
Local Gov’t. Financial Test 567 IAC 113.14(6)“f”		Closure <input type="checkbox"/> Postclosure <input type="checkbox"/> Corrective Action <input type="checkbox"/>	\$
Corporate Guarantee 567 IAC 113.14(6)“g”		Closure <input type="checkbox"/> Postclosure <input type="checkbox"/> Corrective Action <input type="checkbox"/>	\$
Local Gov’t Guarantee 567 IAC 113.14(6)“h”		Closure <input type="checkbox"/> Postclosure <input type="checkbox"/> Corrective Action <input type="checkbox"/>	\$
Local Gov’t. Dedicated Fund 567 IAC 113.14(6)“i”	February 5, 2003	Closure <input checked="" type="checkbox"/> Postclosure <input checked="" type="checkbox"/> Corrective Action <input type="checkbox"/>	\$ 4,734,817

\*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 <i>(see formula below)</i>	\$	\$	\$
Postclosure Account Balance <i>(see formula below)</i>	\$	\$	\$
<b>Or</b>			
Dedicated Fund Balance <i>(see formula below)</i>	\$ 4,379,023	\$ 4,734,817	\$ 257,696
Trust Fund Balance <i>(see formula below)</i>	\$	\$	\$

**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

Y = 4 YEARS (Phase 1, Cell A&B approved for waste disposal in 2023 which reset 10 year pay in period; however, in the case Y calculated as: 209,845 tons capacity remaining divided by 53,735 tons of waste received during FY 24 = 4 years).

Projected Deposit  
 = (\$5,765,600-\$4,734,817)/4 years  
 = \$257,696

**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: Diane Fitch Title: Chair

Agency/Entity: South Central Iowa Landfill Agency

Address: 2520 Highway 92

City: Winterset State: IA Zip: 50273

Telephone: 515-462-3083 Fax: 515-462-3064

Email Address: \_\_\_\_\_

Signature of Official: *Diane Fitch* Date: March 19, 2025

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