April 14, 2025

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



RE:

2025 FINANCIAL ASSURANCE

FLOYD-MITCHELL-CHICKASAW COUNTIES SANITARY LANDFILL

IDNR PERMIT NO. 66-SDP-01-73P

HLW PN 6028-23A.360

Dear Ms Klemesrud:

Included with this letter is financial assurance documentation for 2025 for the Floyd-Mitchell-Chickasaw Counties 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 the FMC Solid Waste Management Agency 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:

Christian Fox, Director, FMC SLF (electronic copy)

<u>Authority</u>

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 <u>all</u> 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 FMC Counties 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 Landfilling Area (closed)	43.5 acres
Phase 1 (active)	5.0 acres
Phase 2 (active)	6.0 acres
Phase 3 (active)	5.6 acres

The Original Landfilling (OL) Area is closed and need not be considered in a closure cost estimate.

The Horizontal Expansion (HE) Area currently consists of Phases 1, 2, and 3. Disposal areas in the HE have been constructed with composite liners meeting EPA Subtitle D requirements. These areas require closure with a composite cap as per the IDNR approved Closure/Postclosure Plan.

Closure Costs - Composite Cap

Closure costs for the Subtitle D compliant Composite Lined horizontal expansion Phases 1, 2, and 3 (16.6 total acres) include cost of constructing the composite FML cap, erosion and surface water control structures, and seeding. Quantities and prices for areas to be closed with a composite cap are estimated to be:

Composite Cap	16.6 acres	\$136,400 /acre	\$2,264,200
(for derivation of cost, see A			
Seeding and Mulching	16.6 acres	\$1,500 /acre	\$24,900
Erosion Control Structures	\$16,600		
	Total Cor	nstruction Cost	\$2,305,700
Add 5% based on construction cost for	\$115,300		
Engineering fees for design, bid process	\$80,700		
Engineering fees for staking, inspection	<u>\$69,200</u>		
	\$2,570,900		

Page 1 of 5 6028-23A

Postclosure Cost Estimate

<u>Note:</u> Postclosure costs in this estimate will be broken out into costs attributed to the Original Landfilling 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 <u>current</u> 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 Landfilling Area is approximately 43.5 acres. The area needing postclosure care in the Horizontal Expansion Area is approximately 16.6 acres. Total area is 60.1 acres.

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

Maintenance/Repair Soil Cap	43.5 acres	\$50 /acre	\$2,200
Maintenance/Repair FML Cap	16.6 acres	\$100 /acre	\$1,700
Reseeding (2% of area annually)	1.2 acres	\$1,200 /acre	\$1,400
Maintenance of Erosion Control	60.1 acres	\$50 /acre	\$3,000
Mowing	60.1 acres	\$50 /acre	\$3,000
			\$11,300

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	\$7,600
HE	\$3,700

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:

Semi-annual inspections (OL), annual groundwater quality reports (OL + HE) and semi-annual groundwater notifications (HE) are required.

Inspections - OL	\$950 each	2 per year	\$1,900
Annual Report - OL + H	IE		\$3,700
Semi-Annual Notificati	ons - HE		\$2,000
			\$7,600
		OL	\$3,800
		HE	\$3,900
		_	
Gas monitoring	\$500 each	4 per year	\$2,000
(quarterly)		OL	\$1,000
		HE	\$1,000

Page 2 of 5 6028-23A

Monitoring Well Sampling and Testing

Assume monitoring well sampling and testing will be as per the SDP Permit and the HMSP. The monitoring well system is separated between the Original Landfilling Area and the Horizontal Expansion Area. Estimated testing costs are as follows:

Apri		13 tests*	\$300 /test	\$3,900
Octo	ber	13 tests*	\$300 /test	\$3,900
		* 12 points and one du	ıplicate	
Sam	pling costs are:			
Apri				\$2,200
Octo	ber			\$2,200
Total, Monitorir	ng Well Sampling ar	nd Testing		\$12,200
			OL	\$6,100
			HE	\$6,100
The postclosure costs and	an audit must be co	ompelted annually for	Financial Assurance.	
•	ncial Assurance dod	•		\$3,400
			OL	\$1,700
			HE	\$1,700

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 and recirculated over the Phases 1, 2, and 3 composite lined areas or hauled to the City of Osage POTW or the City of Mason City POTW for treatment and disposal as needed. For these calculations assume all leachate will be hauled to a POTW for treatment during the postclosure period. Between 2009 and 2012, the site averaged recirculating/hauling approximately 690,000 gallons of leachate per year. Use 690,000 gallons as a typical annual generation rate for consistency with past financial assurance calculations. 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 groundwater diversion system in Phases 1, 2, and 3 and the leachate collection system in the Original Landfilling Area. Assume that the groundwater diversion system/leachate collection system (OL) contributes approximately 10% of the volume of leachate and assume this contribution will continue during the postclosure period. Therefore, total annual leachate generation expected during postclosure is:

69,000 gal/yr (GWD + leachate from OL) + 6,000 gal/yr (Ph 1, 2, and 3)= 75,000 gallons/year

NOTE: Based on the above volume of leachate anticipated and the size of the leachate storage lagoon, leachate will not need to be hauled for treatment every year. Costs have been reduced accordingly.

Assume annual electrical costs to run pump stations and loadout = \$400

Assume 5 loads of leachate are hauled per year. Assume leachate hauling costs are \$160/load. Assume each load is 6,000 gallons.

5 trips \$160 /trip \$800

Assume leachate treatment and testing charges are \$2,400 per year.

Leachate treatment and testing \$2,400

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.

Alliudi Ilidilitelidile di leachate system 33,000	Annual maintenance of leachate system	\$3,000
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Total yearly cost of leachate system:

Electricity	\$400
Leachate Hauling	\$800
Treatment/Testing Charges	\$2,400
Maintenance	\$3,000
	\$6,600

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

Adjusted annual cost of leachate system:

Original Landfilling Area	\$3,300
Horizontal Expansion Area	\$3,300

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:

\$4,500 Annual Equivalent Cost is \$ 1,500

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

Page 4 of 5 6028-23A

Financial Assurance Calculations

<u>CI</u>	osure	

<u>Closure</u>	Phases 1, 2, and 3		\$2,570,900 TOTAL \$2,570,900
Postclosu	re -Original Landfilling Area (annual)		
rostelosa	Maintenance of cap, erosion control, etc.		\$7,600
	Inspections/Groundwater Quality Reporting		\$3,800
	Explosive Gas Monitoring		\$1,000
	Monitoring Well Sampling and Testing		\$6,100
	Financial Assurance Documentation		\$1,700
	Leachate Treatment, Testing, etc.		\$3,300
	200		\$23,500
	For financial assurance calculations, the 30 Original Landfilling Area began in 2009. Fo remaining postclosure period of 14 years to	r 2025 calculations, use a	
Estimated	Postclosure Costs - Original Landfilling Area		
	\$23,500 /year	14 years	\$ 329,000
Postclosu	re -Horizontal Expansion Area (annual)		
	Maintenance of cap, erosion control, etc.		\$3,700
	Groundwater Quality Reporting		\$3,900
	Explosive Gas Monitoring		\$1,000
	Monitoring Well Sampling and Testing		\$6,100
	Financial Assurance Documentation		\$1,700
	Leachate Treatment, Testing, etc.		\$3,300
	Cleaning Collection System (annual cost)		\$1,500
			\$21,200
Estimated	Postclosure Costs - Horizontal Expansion Are	a	
	\$21,200 /year	30 years	\$ 636,000



ATTACHMENT A

OPINION OF PROBABLE COST FMC COUNTIES SLF FML COMPOSITE CAP, cost per acre HLW PN 6028-23A.360 January 8, 2025

Item	Quantity	Unit	Unit Price	Amount
Surface Preparation	4,840	Sq. Yd.	\$0.50	\$2,420.00
Gas Collection Layer	1,400	Tons	\$15.25	\$21,350.00
4" Perforated Gas Collection Piping	600	Lin. Ft.	\$15.00	\$9,000.00
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.	\$6.50	\$31,460.00
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 \$136,420.00



Municipal Solid Waste Sanitary Landfill Financial Assurance Report Form

SECTION 1: FACILITY INFORMATION

(please print or type)

Information Requested			
Facility Name:	Floyd-Mitchell-Chickasaw Counties Sanitary Landfill	Permit Number:	66-SDP-01-73P
Permitted Agency/Entity: Floyd-Mitchell-Chickasaw Solid Waste Management Agency			

SECTION 2: CLOSURE/POSTCLOSURE OR CORRECTIVE ACTION COST ESTIMATES

Information Requested	Cost Estimate	Date of Cost Estimate
Updated Closure Cost Estimate	\$2,570,900	January 9, 2025
Updated Postclosure Cost Estimate	\$965,000	January 9, 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 lowa-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	150,943
Amount of waste disposed of at the facility during the prior year	30,310

SECTION 4: PROOF OF COMPLIANCE

Privately Owned Municipal Solid Waste Landfills

Publicly Owned Municipal Solid Waste Landfills	(ATTACH AUDIT REPORT)
Owner's Most Recent Annual Audit Report	
Prepared by: Gardiner + Company	
For fiscal year ending: September 30, 2024	

(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.

10/2022 cmc Page 1 DNR Form 542-8090

SECTION 5: FINANCIAL ASSURANCE INSTRUMENT

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

Closure	\$
Corrective Action	Y
Closure 🗌	
Postclosure	\$
Corrective Action	
Closure 🗌	
Postclosure	\$
Corrective Action	
Closure 🗌	
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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.

^{*}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 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)	\$ 5,785,590	\$ 6,367,930	NA
Trust Fund Balance (see formula below)	\$	\$	\$

Formula for Projected Deposits

Closure or Postclosure Account

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

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

The dedicated fund balance (\$6,367,930) is greater than the sum of the closure and postclosure cost estimates (\$3,535,900). Financial assurance is fully funded – no additional funds need to be restricted for closure/postclosure at this time.

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: Scott Cerwinske	Title: Chair
Agency/Entity: Floyd-Mitchell-Chickasaw Solid Waste Management Age	ency
Address: 3354-330 th Street	
City: Elma State: IA	Zip: _50628
Telephone: 641-982-4288 Fax: 641	-982-4289
Email Address: <u>landfill@myomnitel.com</u>	
Signature of Official:	Date: 4-10-85

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