SCS ENGINEERS

Transmittal

West Des Moines, IA

PROJECT:	Clinton Co,2025 LF Permit Renewal,IA 27225264.00	DATE:	7/24/2025
SUBJECT:	23-SDP-01-74 2025 Clinton County Sanitary Landfill Permit Renewal Application 07.24.2025	TRANSMITTAL ID:	00001
PURPOSE:	For your approval	VIA:	Info Exchange

FROM

NAME	COMPANY	EMAIL	PHONE
Christine Collier West Des Moines, IA	SCS Engineers	CCollier@scsengineers.com	+1-515-631-6161

TO

NAME	COMPANY	EMAIL	PHONE
Mike Smith 502 East 9th Street Des Moines IA 50319-0034 United States	Iowa, State of	mike.smith@dnr.iowa.gov	515-725-8200
Becky Jolly		becky.jolly@dnr.iowa.gov	

REMARKS:

Mike -

Please find included for your review the 2025 Clinton County Sanitary Landfill Permit Renewal Application. Let us know if you have any questions.

Thank you
Christine

Christine L. Collier, P.E.
Senior Project Manager
SCS Engineers
1690 All-State Court
West Des Moines, Iowa 50265
515-631-6161 (W)
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Transmittal

DATE: 7/24/2025
TRANSMITTAL ID: 00001

DESCRIPTION OF CONTENTS

QTY	DATED	TITLE	NOTES
1	7/24/2025	23-SDP-01-74 2025 Clinton County Sanitary Landfill Permit Renewal Application 07.24.2025.pdf	

COPIES:

Brad Seward	(Clinton County Area Solid Waste Agency)
Kasi Province	(SCS Engineers)
Christine Collier	(SCS Engineers)

July 24, 2025
File No. 27225264.00

Mr. Michael W. Smith, P.E.
Iowa Department of Natural Resources
Land Quality Bureau
6200 Park Avenue, Suite 200
Des Moines, Iowa 50321

Subject: 2025 Permit Renewal Application
Clinton County Sanitary Landfill (East Site)
Permit No. 23-SDP-01-74

Dear Mr. Smith:

On behalf of the Clinton County Area Solid Waste Agency (Agency), SCS Engineers is pleased to submit this Permit Renewal Application for the Clinton County Sanitary Landfill (East Site).

Following standard practice, the permittee and SCS have reviewed the current permit and planning documents. Form 50 for permit renewal applications has been completed. Section 1 has been reviewed and updated. Section 2 has been prepared as required with the Executive Summary. Referenced documents are either included in this submittal if updates occurred or the DocDNA number of the current approved plans has been included. Upon review of this documentation and attachments, the Agency representative has provided signature in Section 3.

It should be noted that the Agency is currently in the process of a lateral expansion plan. The final document is expected to be submitted early 2026 and will result in revisions to sections included herein.

Please feel free to contact us if you have any questions, require additional information, or need any further clarification.

Sincerely,

Kasi D. Province

Kasi Province, P.E.
Project Professional
SCS Engineers

Christine L Collier

Christine L. Collier, P.E.
Senior Project Manager
SCS Engineers

IAC/KDP/CLC

cc: Brad Seward, Director of Operations & Education, Clinton County

2025 Permit Renewal Application
Clinton County Sanitary Landfill (East)

Clinton County Sanitary Landfill (East)
4292 220th Street
Clinton, IA 52733
563-243-4749

I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the state of Iowa.

Christine L. Collier

Christine L. Collier Date

My license renewal date is: December 31, 2025
Pages or sheets covered by this seal:
Reviewed for compliance purposes only.

SCS ENGINEERS

Project No. 27225264.00 | July 2025

1690 All-State Court, Suite 100
West Des Moines, IA 50265
515-631-6160

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Figures

Appendices

1.0 IOWA DEPARTMENT OF NATURAL RESOURCES FORM 50

IOWA DEPARTMENT OF NATURAL RESOURCES

Municipal Solid Waste Landfill

PERMIT APPLICATION FORM 50

☐ **New Permit**

☒ **Permit Renewal (permit number)** 23 **- SDP -** 01 **-** 74P **MLF**

☐ **Closure Permit**

SECTION 1: PERMIT APPLICATION REQUIREMENTS

Owner of site

Name: Clinton County Area Solid Waste Agency Phone: (563) 243-4749

Address: 4292 220th Street Fax: (563) 242-3611

City, State, Zip: Clinton, IA 52732 E-mail: ccaswa@gmtel.net

Certified Operator Responsible for Operation at Facility

Name: Brad Seward, Director of Operations & Education Phone: (563) 243-4749

Address: 4292 220th Street, P.O. Box 996 Fax: (563) 242-3611

City, State, Zip: Clinton, IA 52732 E-mail: ccaswa@gmtel.net

Permit Applicant

Name: Clinton County Area Solid Waste Agency Phone: (563) 243-4749

Address: 4292 220th Street Fax: (563) 242-3611

City, State, Zip: Clinton, IA 52732 E-mail: ccaswa@gmtel.net

Design Engineer (PE)

Name: Christine L. Collier, P.E. Phone: (515) 418-0677

Address: 1690 All-State Ct., Ste. 100 Fax:

City, State, Zip: West Des Moines, IA 50265 E-mail: ccollier@scsengineers.com

Iowa Engineer License #: 17963 Expiration Date: 12/31/2025

Responsible Official for the Facility

Name: Brad Seward, Director of Operations & Education Phone: (563) 243-4749

Address: 4292 220th Street, P.O. Box 996 Fax: (563) 242-3611

City, State, Zip: Clinton, IA 52732 E-mail: ccaswa@gmtel.net

Agency and Responsible Official of Agency Served (if any)

Name: Clinton County Area Solid Waste Agency Phone: (563) 243-4749

Address: 4292 220th Street Fax: (563) 242-3611

City, State, Zip: Clinton, IA 52732 E-mail: ccaswa@gmtel.net

Facility

Name: Clinton County Sanitary Landfill (East Site)

Address: 4292 220th Street City, State, Zip: Clinton, IA 52733

Legal Description:

See current permit.

Landfill is part of the following solid waste comprehensive planning area:

Planning Area Name: Bi-State Regional Planning Area - Iowa Region

Date of Last Approved Plan: 07/21/2023

Service area of the landfill (include unincorporated areas and out of state generators):

All cities and the unincorporated areas of Clinton County

Population Served: 46,015

SECTION 2: PERMIT APPLICATION SUPPORTING DOCUMENTATION

PLANS AND SPECIFICATIONS

Checking the appropriate boxes below certifies that the documents submitted in conjunction with this application form are complete and in compliance with the applicable chapters of the Iowa Administrative Code. While some of the documents below may have been submitted previously, updated copies of each are required to be provided with each permit renewal application, unless a prior document remains current and is identified by Doc ID#, Section, and Page.

Required Plans and Specifications

☒ Executive Summary

An executive summary shall address the following:

- Summary of modifications, if any, to the approved plans and specifications that occurred during the current permit cycle.
- Summary of each special provision of the current permit to determine if it is to remain the same, be revised or be removed.
- Provide documentation and certification as required for new permit amendment requests, if any.
- Provide documentation and certification as required for equivalency review requests, if any.
- Provide documentation and certification as required for new variance requests from Iowa Administrative Code requirements, if any.

☒ An organizational chart in accordance with Iowa Administrative Code 567 paragraph 113.5(1)"b".

No Revision Required - See Doc ID#, Section, and Page: _____

☐ A site exploration and characterization report for the facility that complies with the requirements of subrule 113.6(4).

No Revision Required - See Doc ID#, Section, and Page: DocDNA # 43594

☐ Design plans and specifications for the facility, and quality control and assurance plans, that comply with the requirements of rule 113.7(455B).

No Revision Required - See Doc ID#, Section, and Page: DocDNA # 43594

☒ A development and operations (DOPS) plan for the facility, an emergency response and remedial action plan (ERRAP), and proof of MSWLF Operator Certification that comply with the requirements of rule 113.8(455B) .

No Revision Required - See Doc ID#, Section, and Page: _____

☐ An environmental monitoring plan that complies with the requirements of rules 113.9(455B) and 113.10(455B).

No Revision Required - See Doc ID#, Section, and Page: DocDNA #s 43594 (MMP), 95626 (HMSP)

☐ The project goals and time lines, and other documentation as necessary to comply with subrule 113.4(10) and other requirements of the Department if an RD&D permit is being requested or renewed.

No Revision Required - See Doc ID#, Section, and Page: N/A

☐ Proof of financial assurance in compliance with rule 113.14(455B).

No Revision Required - See Doc ID#, Section, and Page: DocDNA # 113013

☐ A closure and postclosure plan that complies with the requirements of rules 113.12(455B) and 113.13(455B).

No Revision Required - See Doc ID#, Section, and Page: DocDNA # 85357

☒ Comprehensive plan requirements. Attach a copy of the most recent comprehensive plan approval or amendment letter.

No Revision Required - See Doc ID#, Section, and Page: _____

☐ Household Hazardous Materials (HHM) collection certification. If applicable, include a plan for HHM temporary collection and storage in accordance with IAC 567 Chapter 123 (455B, 455D, 455F).

No Revision Required - See Doc ID#, Section, and Page: N/A

In addition to the documents required above, the permit holder shall comply with the implementation plan requirements of subrule 113.2(9), the public notice requirements of subrule 113.4(12), and the record-keeping and reporting requirements of rule 113.11(455B).

If the department finds the permit application information to be incomplete, the department shall notify the applicant of that fact and of the specific deficiencies. If the applicant fails to correct the noted deficiencies within 30 days, the department may reject the application and return the application materials to the applicant. The applicant may reapply without prejudice.

SECTION 3: APPLICANT SIGNATURE

Signature of Permit Applicant:  **Date:** July 2, 2025

Printed Name: Brad Seward **Title:** Director of Operations & Education

Applications for sanitary disposal projects must be accompanied by the plans, specifications and additional information required by the applicable solid waste rules under Iowa Administrative Code.

Send completed applications with attached information to the DNR project officer via email or file sharing platform.

For questions concerning this application contact Brian Rath at 515-537-4051, brian.rath@dnr.iowa.gov

2.0 EXECUTIVE SUMMARY

2.1 INTRODUCTION

The information required in the Executive Summary is listed in Section 2.0 of the Permit Application Form 50 and includes a summary of modifications, special provisions, permit amendments, and documentation and certification as required for new permit amendment requests and new waiver requests.

2.2 SUMMARY OF MODIFICATIONS

Modifications to the current plans and specifications during the current permit cycle (October 1, 2020 to present) are summarized in Table 1.

Table 1. Permit Modifications History

Date	Permit Modification
10/1/2020	Permit renewal – approval letter sent
2/3/2021	Approval granted to use Auto Shredder Residue (ASR) as alternate Daily Cover (ADC).
6/22/2022	HMSP Revision – Point of Compliance
7/29/2022	HMSP Revision – Removal of MW-21 from HMSP
6/5/2023	Permit Revision #6, removed background bedrock well MW-43BG from the HMSP (Special Provision X.4.a).
3/6/2024	Permit Revision #7 approves the plan to install a leachate interceptor trench (Special Provision XI.13.h).
6/27/2024	Approval granted to use Auto Shredder Residue (ASR) as alternate Daily Cover (ADC).
3/6/2025	Permit Revision #8 approves the North MSWLF Unit – Leachate Intercept Trench Construction Documentation Report (Special Provision XI.13.i).

2.3 SPECIAL PROVISIONS OF CURRENT PERMIT

Following is a summary of each special provision (Section X. Special Provisions) of the current permit in addition to a brief discussion if it is to remain the same, be revised, or be removed.

Special Provision #1.

The permit holder is authorized to accept solid waste for disposal in accordance with the approved Bi-State Regional Planning Area – Iowa Region Comprehensive Plan, Part I. The Comprehensive Plan, Part I as approved on May 26, 2016; any approved amendments to the plan; and the latest plan update, are incorporated into the permit.

The permitted service area includes all cities and the unincorporated areas of Clinton County.

In accordance with subrule 101.13(2), the permit holder shall submit an updated Comprehensive Solid Waste Management Plan compliant with the DNR's schedule.

Please update the comprehensive plan to the most recent comprehensive plan approval (July 21, 2023) included with this submittal in Appendix A. There are no other changes required or requested to Special Provision #1.

Special Provision #2.

The permit holder shall develop and operate the site in accordance with the Development and Operations Plan contained in Appendix 5 of the 2015 Permit Renewal documentation (doc #82424), dated February 3, 2015 and approved on August 17, 2015, as submitted by Barker Lemar Engineering Consultants, and the following:

a. *Waste disposal is limited to the Phase 0, Phase IA, Phase E-1, and Phase 2 Cells. The site vertical height shall not exceed a maximum waste elevation of 820 feet near N 695400 and E 2522200. Any further expansion beyond these cells shall require prior DNR approval.*

b. *The permit holder shall collect leachate from the leachate control system and properly dispose of the leachate either by treatment in an on-site facility, discharge with an NPDES permit; or by discharge to the City of Clinton publicly owned treatment works (POTW). If the discharge is to a POTW with a pretreatment program approved by the DNR, the discharge must comply with the terms and conditions of a local permit issued for the discharge by the POTW. If the discharge is to a POTW without an approved pretreatment program a completed treatment agreement form shall be submitted to the DNR's Wastewater Section. Copies of the local permit or treatment agreement shall be provided to the DNR's Solid Waste Section and the local Field office. The treatment agreement must be on DNR Form 31 (542-3221) and must comply with the requirements of subrule 64.3(5).*

   In addition, the permit holder shall monthly measure leachate head levels and elevations at all piezometers and record the volume of leachate collected and transported to the treatment works. Records of leachate contaminants testing required by the treatment works and any NPDES permit for on-site treated leachate discharges shall be maintained.

   The permit holder shall annually submit a Leachate Control System Performance Evaluation (LCSPE) Report pursuant to subparagraph 113.7(5)"b"(14) as a supplement to the facility Annual Water Quality Report, as defined in subrule 113.10(10).

c. *The following shall be recorded by the permit holder and reported in the LCSPER for each leachate thickness measurement that equals or exceeds 12 inches:*
   1) *Date of original and any verification measurement.*
   2) *If 12 inch or greater leachate column is verified, specific actions taken by the certified operator to lower leachate thickness, or an explanation why specific actions were not necessary.*
   3) *Date and results of follow-up measurement.*

   Repeat steps 2 and 3 as necessary until a compliant measurement is collected.

d. *The permit holder shall follow the approved Emergency Response and Remedial Action Plan (ERRAP) procedures during all emergencies pursuant to subrule 113.8(5). An updated ERRAP shall be submitted at the time of each permit renewal application. An updated ERRAP shall be included with any request for permit modification to incorporate a facility*

expansion or significant changes in facility operation that require modification of the currently approved ERRAP.

e. *In accordance with the letter (doc #80384) dated May 29, 2014, as submitted by Barker Lemar Engineering Consultants, the site Development and Operations Plan includes a public drop-off area at the landfill.*

f. *In accordance with the litter control policy contained in Attachment B of the Permit Renewal Application response letter (doc #83671) dated June 18, 2015, as submitted by Barker Lemar Engineering Consultants, the permit holder shall utilize litter fence to minimize the blowing of litter, and complete and maintain the daily litter collection log as included in the letter. If the facility continues to have litter problems, as defined by the DNR Field Office as a Letter of Noncompliance or Notice of Violation, the policy shall be amended as necessary.*

Please update the permit renewal application to this application, and the Development and Operations plan to the plan included in Appendix B of this application. Please also update Item #2d per the updated ERRAP included in Appendix E. There are no other changes required or requested to Special Provision #2.

Special Provision #3.

The permit holder shall construct the liner and leachate collection systems in accordance with the 2016 Master Plan (doc#85357), dated February 4, 2016, as amended by the Barker Lemar Engineering Consultants submittal dated March 8, 2016 (doc#85639) and approved on April 14, 2016; and the Barker Lemar Engineering Consultants submittal dated January 31, 2020 (doc #96916) and approved on March 8, 2020; and the following:

a. *The permit holder is authorized to construct the Phase E-2 cell as depicted in the documents referenced above. Ninety (90) days prior to commencement of construction activities for the Phase E-2 cell, the permit holder shall submit a request to construct the cell, including tentative construction schedules and Final QC&A submittal dates. Construction of the cell shall not commence without DNR approval of this request.*

   Any further expansion beyond this cell shall require DNR approval. No waste disposal shall commence in the Phase E-2 cell until the final construction certification has been submitted in accordance with paragraph 113.7(6)"d", and the cell has been inspected and approved by the DNR.

b. *Ninety (90) days prior to commencement of construction activities for the Phase E-2 cell, the permit holder shall submit a request to construct the cell, including tentative construction schedules and Final QC&A submittal dates. Construction of the cell shall not commence without DNR approval of this request.*

c. *The updated Quality Control and Assurance Plan - New Cell Construction (doc #89567), dated May 25, 2017, as submitted by Barker Lemar Engineering Consultants, and approved on June 23, 2017, is incorporated into the permit.*

d. *The permit holder shall notify the DNR and have the site inspected when the construction of a new MSWLF unit or significant components thereof has been completed, in accordance with subrule 113.4(6). Prior to the inspection, the QC&A officer shall submit a final report to*

the DNR that verifies compliance with the requirements of rule 113.7 and the approved plans and specifications. No waste disposal shall commence in any newly constructed unit or portion thereof until it has been inspected and approved by the DNR.

e. *The Construction Certification Report for Phase 0 Cell Construction (doc #8074), dated September 4, 2007, as submitted by Barker Lemar Engineering Consultants and approved on September 20, 2007, is incorporated into the permit.*

f. *The Phases 1 and 2 Construction Phasing Revisions and Request for Post-Permit Action (doc #63039), dated January 14, 2011, as submitted by Barker Lemar Engineering Consultants and approved on April 7, 2011, is incorporated into the permit.*

g. *The Phase 0 Leachate Collection System Modifications construction certification report (doc #66368), dated August 22, 2011, as submitted by Barker Lemar Engineering Consultants, and approved on October 5, 2011, is incorporated into the permit. The LCS modification consisted of the installation of a 100 foot perforated leachate collection pipe in the southeastern corner of the Phase 0 cell.*

h. *The Construction Observation Report, Phase 1A Cell Construction (doc #66679), dated September 28, 2011, including the revisions dated October 3, 2011 (doc #66699) as submitted by Barker Lemar Engineering Consultants and approved on October 5, 2011, is incorporated into the permit.*

i. *The construction documentation for leachate piezometers LMW-5DR and LMW-6AR (doc #78178), dated September 26, 2013, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.*

j. *In document #82558, dated February 27, 2015, the permit holder reported that discharge from the Phase 1A cell groundwater underdrain monitoring point GU-1 has been connected to the leachate storage lagoon.*

k. *The Phase E-1 Cell Construction Observation Report (doc #90294), dated September 12, 2017, as submitted by Barker Lemar Engineering Consultants, and approved on September 13, 217, is incorporated into the permit.*

l. *The Phase 2 Cell Construction Observation Report, dated September 9, 2020, as submitted by Evora Consulting, and approved on September 10, 2020, is incorporated into the permit.*

There are no changes required or requested to Special Provision #3.

Special Provision #4.

Hydrologic monitoring at the site shall be conducted in accordance with the Revised Hydrologic Monitoring System Plan (HMSP, doc #95626), dated July 30, 2019, as submitted by Barker Lemar Engineering Consultants and approved on October 25, 2019; the HMSP and Corrective Action Groundwater Monitoring Program Modification request (doc #103586), dated July 12, 2022 and approved on July 29, 2022; and the following:

a. *The HMSP for the South MSWLF unit, including the Phase 0 and Phase 1A cells in the Lateral Expansion, shall include the following:*

(1) *Unconsolidated aquifer background groundwater monitoring point MW-06-7R;*

(2) *Unconsolidated aquifer downgradient compliance wells, MW-05-8R, MW-19, and MW-25R;*

(3) *Downgradient attenuation zone compliance wells MW-05-2, MW-05-3, MW-28, and MW-29;*

(4) *Supplemental attenuation zone source wells MW-90-11, MW-20, MW-24, MW-32, and MW-33[1];*

(5) *Bedrock aquifer downgradient compliance wells MW-39, MW-40, MW-41, MW-42;*

(6) *underdrain monitoring points UD-2 and GU-1; and*

(7) *Corrective action monitoring program (CAMP) points[2].*

[1] Samples from the supplemental attenuation zone source wells shall be analyzed semiannually for the Appendix 1 parameters and biennially for total organic carbon, nitrate, iron, manganese, and sulfate until the DNR approves otherwise. Since these wells are not compliance points, they are not subject to the requirements of 567 IAC 113.10(5)"c" and 113.10(6).

[2] The Selection of Remedy and Corrective Action Monitoring Program (CAMP) letter report (doc #97615), dated April 27, 2020, and CAMP amendment (doc #98264), dated August 17, 2020, both submitted by Evora Consulting, was approved on September 10, 2020. The CAMP has been further modified in accordance with HMSP and Corrective Action Groundwater Monitoring Program Modification request (doc #103586), dated July 12, 2022 and approved on July 29, 2022. As described in these documents, the following corrective action monitoring activities will be conducted semiannually in addition to the routine monitoring required in 567 IAC 113.10(5,6) until otherwise approved:

- *Delineation wells MW-90-18, and MW-34 – for vinyl chloride, and*
- *Phase E-1 gas vent – for methane.*

b. *The permit holder shall semiannually collect groundwater elevation data from monitoring wells MW-21, MW-05-1, MW-05-2, and MW-05-3 and the Phase 1A underdrain in order to measure the separation of the base of the MSWLF unit from the groundwater table as required in paragraph 113.6(2)"i". This data shall be included in the facilities' AWQR.*

c. *DNR construction documentation form 542-1277 and boring logs for all monitoring wells and piezometers shall be submitted within 30 days of installation. DNR construction documentation form 542-1323 shall be submitted within 30 days of establishing surface water monitoring points.*

d. The permit holder shall conduct background and routine semiannual groundwater sampling and analysis; as well as perform statistical tests for the approved monitoring points for the Appendix I parameters and total suspended solids (TSS) in accordance with rule 113.10(455B). Groundwater samples shall not be field-filtered prior to laboratory analysis and total suspended solids shall be analyzed using Method 1376585, with a reporting limit goal of <= 2 mg/l). Turbidity measurement may be approved by the DNR in lieu of TSS, provided a correlation between the two is established.

Groundwater underdrain point GU-1 is approved for annual sampling as discharge from this point is being treated as leachate.

e. The permit holder shall include in each AWQR an evaluation of TSS/turbidity data and other pertinent sampling and analytical results, to determine if representative samples of groundwater have been collected. If samples are not representative, the permit holder may be required to utilize low flow or no-purge sampling methods, consider new well construction with an optimized filter pack design, and/or additional well development. If sample quality does not improve with improved well construction, well development, and/or sampling methods, the DNR will consider higher TSS/turbidity levels as representative of site groundwater conditions.

f. The frequency for full Appendix II analysis at monitoring points that are in assessment monitoring and have had at least two (2) rounds of analysis using the entire Appendix II list is once every (5) five years. If monitoring points exit assessment monitoring and later return to assessment monitoring an additional two (2) rounds of analysis using the entire Appendix II list is required.

g. The permit holder shall semiannually measure groundwater elevations within 1/100 of a foot in each well and immediately prior to purging, each time groundwater is sampled.

h. An Annual Water Quality Report (AWQR) summarizing the effects the facility is having on groundwater quality shall be submitted to the DNR's Solid Waste Section by January 31 each year. This report shall be prepared in accordance with subrule 113.10(10) by a qualified groundwater scientist pursuant to paragraph 113.10(1)"d" and by using the DNR Annual Water Quality Report Format.

i. The Well Abandonment Documentation for MW-90-1, MW-90-2, MW-92-1, and OLD MW (doc #8369), dated August 30, 2007, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

j. The well construction documentation for MW-07-10 construction documentation (doc #8864), dated September 20, 2007, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

k. The well abandonment documentation for MW-90-4 (doc #43037), dated April 30, 2009, as submitted by Barker Lemar Engineering Consultants is incorporated into the permit.

l. The construction documentation for monitoring wells MW-19, MW-10, MW-21, and MW-22, and landfill gas wells LFG-W1, LFG-W2, and LFG-W3 (doc #548646), dated January 29,

2010, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

m. *The well abandonment documentation for MW-07-10 (doc #64463), dated April 1, 2011, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.*

n. *The well abandonment documentation for MW-05-6 (doc #66748), dated June 16, 2011, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.*

o. *The well construction documentation for MW-25 (doc #65730), dated July 5, 2011, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.*

p. *The well construction documentation for MW-26 through MW-31 (doc #76261), dated March 21, 2013, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.*

q. *The well construction documentation for MW-32 and MW-33 (doc #78178), dated September 26, 2013, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.*

r. *The construction documentation for groundwater monitoring wells MW-05-8R, MW25R, and MW-34 (doc #82841), dated March 24, 2015, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.*

s. *The construction documentation for monitoring wells MW-39 through MW-43BG and leachate piezometer LMW-5AR, dated February 15, 2018 (doc #91564) and submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.*

t. *The abandonment documentation for monitoring well MW-90-8R and construction documentation for gas well LFGW-3 (doc #96321), dated November 6, 2019, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.*

There are no changes required or requested to Special Provision #4.

Special Provision #5.

The permit holder shall conduct subsurface gas monitoring in accordance with the Revised Landfill Gas Monitoring Plan (doc #59575), dated April 7, 2009, as submitted by Barker Lemar Engineering Consultants and approved on May 26, 2009, and the following:

a. *The permit holder shall quarterly monitor and annually report site methane concentrations in accordance with rule 113.9(455B). Specific actions, as defined in the rules, shall be taken in the event of methane gas level limit exceedances.*

b. *The permit holder shall annually submit a report by January 31 summarizing the methane gas monitoring results and any action taken resulting from gas levels exceeding the specified limits during the previous 12 months as a supplement to the facility Annual Water Quality Report, as defined in subrule 113.10(10).*

c. *The Landfill Gas Well Installation documentation for LFGW-4, LFGW-5, LFGW-6, and LFGW-7 (doc #63865), dated February 15, 2011, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.*

There are no changes required or requested to Special Provision #5.

Special Provision #6.

The permit holder is authorized to collect, process, grind, or chip trees, limbs, brush, and clean wood wastes free of coatings and preservatives, for the purposes of reuse as bedding material, mulch, compost bulking material; or for other beneficial reuses, in accordance with the following:

a. *Trees, limbs, brush, and clean wood wastes shall not be stored for a period exceeding twelve (12) months before processing.*

b. *Ground or chipped materials shall not be allowed to accumulate such that the stockpiles are not completely reused within twelve (12) months of initial stockpiling.*

c. *The processed materials may be used as mulch or soil conditioner for off-site purposes and on landfill areas with intermediate and final cover and on soil borrow areas.*

d. *Mulch or soil conditioner applied to existing vegetated landfill areas shall be applied at a rate such that established vegetation is not adversely impacted by its use.*

There are no changes required or requested to Special Provision #6.

Special Provision #7.

In accordance with the variance approval dated October 1, 2020, the permit holder may burn trees and tree trimmings resulting from the August 20 derecho event within the designated areas described in the August 21, 2020 request from Evora Consulting (doc #98290), until August 21, 2021. In accordance with the request, open burning shall be conducted in a manner to reduce impact to neighbors, and shall not be conducted when significant winds exist.

There are no changes required or requested to Special Provision #7.

Special Provision #8.

The permit holder is authorized to utilize a de-watered industrial process sludge produced by Equistar Chemicals LP in combination with soil as daily and intermediate cover subject to the following conditions:

a. *The soil-sludge mixture shall not exceed 20 percent by weight sludge. The quantity of sludge accepted by this landfill shall be limited to that required for cover. The disposal of additional quantities of the sludge in excess of that required for cover material is not authorized.*

b. *Quantities exceeding 1-week usage shall be disposed in the workface area.*

c. *Appropriate measures shall be taken in the use or stockpiling of soil-sludge mixture of the mixture to prevent erosion of the mixture. Should adequate erosion control and the retention*

of sediments fail to be provided, the DNR reserves the right to require modification of the operating procedures.

d. Records shall be maintained of the amount of sludge received.

e. *The permit holder shall notify the DNR regarding any problems encountered with use of the soil-sludge mixture.*

f. A composite sample of the sludge shall be collected by September 1 and March 1 of each year and analyzed for the parameters listed in TCLP test except for the pesticides. Results of the analyses shall be submitted to this DNR within 60 days of the sampling.

g. The DNR reserves the right to terminate the use of soil-sludge mixture at any time if deemed appropriate.

There are no changes required or requested to Special Provision #8.

Special Provision #9.

The permit holder is authorized to use geotextiles by the trade names Typar and TarpARMOR as alternative cover materials for the active MSWLF unit, subject to the following:

a. The use and installation of this product shall be in conformance with the manufacturer's recommendations.

b. This product shall only be used as a daily alternative cover material and shall not be utilized as a replacement for soil cover if application performance in terms of litter, vector, odor, and precipitation entry control is not provided.

c. This product shall be applied so as not to promote water ponding, or drainage run-on from adjacent upper and side MSWLF unit areas beneath the installed geotextile.

d. This product shall be weighted at the close of each working day to prevent displacement by wind using soil or tires.

e. This product shall not be exposed for longer than seven (7) consecutive days. For any waste covered with this product beyond the stipulated period, the product shall be removed and the underlying waste shall be immediately covered with soil in accordance with the applicable IAC rules.

f. This product shall not be used if it becomes damaged or worn, or if the intended performance is breached. In such instances, this product shall be disposed of as a part of the waste fill.

g. The operator shall inspect each application of this product for thorough coverage and cover integrity. If operational problems arise from the use of this product or its method of application, the use of this product shall be suspended until proper corrections are made by the operator, with six inches of compacted daily cover being utilized during this interim period.

h. *If, at any time, the DNR or permit holder deems this product ineffective or otherwise unsatisfactory, the permit holder shall immediately revert to soil or another previously approved alternative daily cover. The permit holder shall immediately notify the DNR's Main and local Field office through both written and verbal notification of this action. This notification is not necessary if use of this product ceases only on a temporary basis, such as during adverse operational or weather conditions.*

There are no changes required or requested to Special Provision #9.

Special Provision #10.

The permit holder is authorized to use of biomass sludge from ADM (Clinton) mixed with soil as alternative daily cover in accordance with their letter (doc #40245) dated May 9, 2003, and the following:

a. *Only biomass sludge from aerobic wastewater treatment of food waste at the ADM plant in Clinton and which has been dried shall be accepted, stockpiled and used.*

b. *The maximum amount of sludge accepted shall not exceed 800 tons per month.*

c. *The sludge shall be blended with site soils on a 50/50 by volume basis for use as the authorized alternative covers. All sludge accepted by the landfill shall be soil-blended by the end of the working day of receipt. The resultant mixture shall be temporarily stockpiled in an area close to the working face and shall be used as an alternative daily cover within 7 days.*

d. *Runoff from all pre-blended and post-blended sludge/soil stockpiles shall be controlled to prevent sludge from being released beyond the working face and stockpile area.*

e. *A 6"-thick compacted layer of the sludge and soil blend shall be used to cover the waste in the regular working face.*

f. *The sludge and soil mixture shall not be used as an intermediate or final soil cover.*

g. *In the event of any adverse environmental, operational, odor, rodent, or vector problem implications caused by the acceptance, blending, stockpiling, and cover use operations, the alternative cover use shall be immediately terminated, all sludge materials disposed of in the working face, the DNR's Main and Field Office #6 notified, and the landfill required to revert to other approved daily cover materials. Any adverse contaminant releases to the environment shall be promptly remedied.*

There are no changes required or requested to Special Provision #10.

Special Provision #11.

The permit holder is authorized to accept Foundry Sand from Westwick Foundry Ltd. in Galena, Illinois or from Gray Powder Technologies in Muscatine, Iowa. The permit holder is authorized to use a foundry sand/soil combination as an alternative cover material, subject to the following:

a. *The ratio of foundry sand to soil shall not exceed 50% foundry sand by volume. Quantities exceeding 1-week usage shall be disposed in the workface area. Only foundry sand placed at*

a ratio of 6:1 (6 tons of waste to 1 ton of approved foundry sand) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste. Pursuant to Iowa Code section 455B.310(9), foundry sand used by a sanitary landfill as daily cover is exempt from imposition of the tonnage fee if the foundry sand is generated by a foundry located within the state and if the foundry sand is provided to the permit holder at no cost to the permit holder.

b. *The foundry sand/soil may be used in lieu of the 6-inch daily cover requirement. Foundry sand/Soil shall not be used as a substitute for intermediate or final soil cover.*

c. *The waste must be compacted, before the foundry sand/soil is applied, to provide an even surface to minimize ponding, prevent pockets, and to maximize uniform surface drainage.*

d. *Foundry sand/soil shall be applied to the active waste face at the end of each day of operations and more frequently if necessary to control fire or fire hazards, blowing litter, scavenging, odors, insects, and rodents.*

e. *The soil ratio shall be increased, if necessary, to optimize cover performance relative to the criteria stated in items "c" and "d" above.*

f. *The permit holder shall scarify the foundry sand/soil cover material over the working face area on which it is applied prior to each day's use of that area as a working face.*

g. *The permit holder shall maintain in the landfill files appropriate quarterly laboratory analytical documentation that demonstrates that the foundry sand is not hazardous by TCLP metals test. Documentation reporting of such testing shall be submitted to both the DNR's Main and local Field office.*

h. *The use of foundry sand/soil for daily cover usage by any other generator than the one approved above shall be subject to specifications approval by the DNR.*

i. *If the foundry sand/soil is found by the DNR not to be performing satisfactorily, its use shall be discontinued and the remaining materials shall be disposed in the working face.*

There are no changes required or requested to Special Provision #11.

Special Provision #12.

The permit holder is authorized to accept sandblast or coal combustion residue from ADM in Clinton, Iowa, and coal combustion residue from Alliant Energy's Clinton, Iowa plant. The permit holder is authorized to use sandblast residue or CCR/soil combination as an alternative cover material, subject to the following:

a. *The ratio of sandblast residue or CCR to soil shall not exceed 50% sandblast residue or CCR by volume. Quantities exceeding 1-week usage shall be disposed in the workface area. Only CCR placed at a ratio of 6:1 (6 tons of waste to 1 ton of approved CCR) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste.*

b. *The alternative cover material may be used in lieu of the 6-inch daily cover requirement but it shall not be used as a substitute for intermediate or final soil cover.*

c. *The waste must be compacted before the alternative cover material is applied to provide an even surface to minimize ponding and maximize uniform surface drainage.*

d. *The alternative cover material shall be applied to the active waste face at the end of each day of operations and more frequently if necessary to control fire or fire hazards, blowing litter, scavenging, odors, insects, and rodents.*

e. *The soil ratio shall be increased, if necessary, to optimize cover performance relative to the criteria stated in items "c" and "d" above.*

f. *The permit holder shall scarify any alternative cover material prior to each day's use of that area as a working face.*

g. *The permit holder shall maintain in the landfill files appropriate quarterly laboratory analytical documentation that demonstrates that the sandblast residue or CCR is not hazardous by TCLP testing. Documentation reporting of such testing shall be submitted to both the DNR's Main and local Field Office.*

h. *The use of sandblast residue or CCR for daily cover usage by any other generator than the one above shall be subject to specifications approval by the DNR.*

There are no changes required or requested to Special Provision #12.

Special Provision #13.

The permit holder is authorized to accept Automobile Shredder Residue (ASR) from the Clayton County Recycling facility in Monona, Iowa. The permit holder is authorized to use an ASR/soil combination as an alternative cover material, subject to the following:

a. *The permit holder shall remove all materials exceeding 1.5 inches in size before mixing with soil on a 50% by volume basis and using as an alternative daily cover material. The ratio of ASR to soil shall not exceed 50% ASR by volume. Quantities exceeding 1-week usage shall be disposed in the workface area. Only ASR placed at a ratio of 6:1 (6 tons of waste to 1 ton of approved ASR) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste.*

b. *The ASR/soil may be used in lieu of the 6-inch daily cover requirement. ASR/soil shall not be used as a substitute for intermediate or final soil cover.*

c. *The waste must be compacted, before the ASR/soil is applied, to provide an even surface to minimize ponding, prevent pockets, and to maximize uniform surface drainage.*

d. *ASR/soil shall be applied to the active waste face at the end of each day of operations and more frequently if necessary to control fire or fire hazards, blowing litter, odors, insects, and rodents.*

e. *The soil ratio shall be increased, if necessary, to optimize cover performance relative to the criteria stated in items "c" and "d" above.*

f. *The permit holder shall scarify the ASR/soil cover material over the working face area on which it is applied prior to each day's use of that area as a working face.*

g. *The permit holder shall maintain in the landfill files appropriate quarterly laboratory analytical documentation that demonstrates that the ASR is not hazardous by TCLP metals test, contains no PCBs that equal or exceed 50 ppm, is not ignitable, and has certification from the generator that the material was processed according to the above noted specifications. Documentation reporting of such testing shall be submitted to both the DNR's Main and local Field office.*

h. *The use of ASR/soil for daily cover usage by any other generator than the one approved above shall be subject to specifications approval by the DNR.*

i. *If the ASR/soil is found by the DNR not to be performing satisfactorily, its use shall be discontinued and the remaining materials shall be disposed in the working face.*

There are no changes required or requested to Special Provision #13.

Special Provision #14.

In accordance with the variance approval dated May 19, 2015 (doc #83414), the permit holder may dispose of up to 120 tons per week of Class II sewage sludge from the City of Clinton Regional Water Reclamation Facility until the expiration date of this permit.

There are no changes required or requested to Special Provision #14.

Special Provision #15.

The permit holder is authorized to temporarily store a maximum of 20 tons/year of mixed colored glass for alternative daily cover use. The maximum percentage of mixed glass in the daily cover blend shall not exceed 10% by volume. The mixed glass/soil blend shall be stockpiled in an area close to the working face that will not interfere with disposal operations, as directed by the landfill supervisor. Glass shall not be utilized in intermediate or final cover.

There are no changes required or requested to Special Provision #15.

Special Provision #16.

The permit holder is authorized to accept and temporarily store a maximum of 1500 waste tire equivalents for the purpose of reclamation processing or disposal. Tire storage and processing shall be conducted at approved plan locations. The tires shall be removed at least once every 120 days and transported to the appropriate reclaimer/processor, or disposed of at the site. All operations shall be in accordance with subrule 109.10(3), IAC 567 Chapter 117 and the current local fire code.

There are no changes required or requested to Special Provision #16.

Special Provision #17.

The permit holder is authorized to collect and temporarily store used oil for recycling purposes. The storage tank(s) shall be designed and maintained to prevent the spillage or discharge of used oil. Absorbent material shall be available at the tank site for use by the operator to control used oil spillage or discharge. The used oil shall be processed in accordance with IAC 567 Chapter 119. The maximum length of time for storage is twelve (12) months.

There are no changes required or requested to Special Provision #17.

Special Provision #18.

The permit holder is authorized to accept and temporarily store antifreeze for recycling purposes. The antifreeze shall be stored in plastic drums at a location designated by the operator. Absorbent material shall be available for use by the operator to control antifreeze spillage or discharge. The plastic drums shall be placed in a spill control pan of a capacity sufficient to contain the contents of the largest drum with all drums in place in the control pan. The maximum length of time for storage is twelve (12) months.

There are no changes required or requested to Special Provision #18.

Special Provision #19.

The permit holder is authorized to temporarily store white goods and scrap metal in an area designated by the operator. No discarded appliance may be stored for more than 270 days without being demanufactured. No scrap metal or discarded appliance may be stored for more than a total of twelve (12) months, including demanufacturing processing, prior to being recycled/salvaged. The operator and salvaging contractor shall comply with applicable provisions of IAC 567 Chapter 118 and the General Provisions of this permit. No scavenging shall be allowed.

There are no changes required or requested to Special Provision #19.

Special Provision #20.

The permit holder is authorized to accept and temporarily store lead acid batteries for recycling purposes. Lead acid batteries must be stored in a designated area that will curtail movement of acids and provide proper ventilation of gases from the batteries. The maximum length of time for storage is twelve (12) months.

There are no changes required or requested to Special Provision #20.

Special Provision #21.

The permit holder is authorized to collect and temporarily store plastic farm pesticide containers for recycling. The storage area shall be located at a readily accessible area to the facility. The following conditions and procedures shall apply:

a. *Pesticide containers containing any product or free liquids shall not be accepted for recycling or disposal.*

b. *The storage area shall be used only for recyclable plastic farm pesticide containers that have been properly rinsed and drained. Contact the Iowa Department of Agriculture and Land Stewardship (IDALS) Pesticide Bureau at (515) 281-8506 for container rinsing and recycling information.*

c. *The storage area shall be either fenced or provided with a recycle bin to keep the containers segregated from other wastes and to prevent them from leaving the storage area during windy conditions.*

d. *The storage area base shall be graded to divert surface water run-on. An all weather access to the area shall be provided.*

e. *The base of the storage area that does not utilize a recycle bin should be provided with either an impervious surfacing, rock or anchored plastic membrane surfacing over a compacted soil base to keep the containers free of dirt to maximize material recovery and minimize damage to recycle grinding equipment.*

f. *All stored containers shall be removed from the temporary storage area and granulated on-site for recycling purposes by April 1st annually. Contact the Agribusiness Association of Iowa at (515) 262-8323 to schedule container recycle granulation and site removal.*

g. *The storage area shall be monitored frequently by the operator to confirm proper usage and to visually check for the presence of any product or rinsate releases to the environment or storage area.*

h. *Any containers found in the storage area with free product or product rinsate liquids shall be promptly removed from the storage area and either returned to the disposer or properly rinsed, drained and the liquids discharged to the on-site leachate storage system or land applied on the landfill site at the allowable labeled application rate for the product. Care should be taken to apply the product liquids to the appropriate area.*

i. *If any apparent releases to the storage area are observed by the operator or DNR personnel, the operator shall promptly report the event to the IDALS Pesticide Bureau by telephone at (515) 281-8506 with a follow-up written report of the event to IDALS. Report copies shall be provided to the DNR's Main and local Field office. IDALS representatives will conduct a site visit, sample the appropriate areas, complete the necessary contaminant(s) testing and notify the DNR of any recommended actions to be taken. The DNR will inform the permit holder of required actions to remedy the release.*

There are no changes required or requested to Special Provision #21.

Special Provision #22.

The permit holder shall permit holder shall close the South MSWLF Unit in accordance with the 2016 Master Plan (doc #85357), dated February 4, 2016, as amended by the submittal dated March 8, 2016 (doc #85639), both submitted by Barker Lemar Engineering Consultants and approved on April 14, 2016; and the following:

a. *The Final Closure Request regarding the verification of closure of 11.5 unlined acres referred to as Ravine #5 in the South MSWLF Unit (doc #40252), dated August 26, 2005, as*

submitted by Barker Lemar Engineering Consultants and approved on August 10, 2006, is incorporated into the permit.

b. *The Closure Observation Report, regarding final cover and leachate collection system construction on the final remaining 19.7 acres in the unlined portion of the South MSWLF unit (doc #55423), dated February 12, 2010, as submitted by Barker Lemar Engineering Consultants and approved on May 7, 2010, is incorporated into the permit.*

c. *Effective control of leachate in the unlined portion of the South MSWLF unit shall be evaluated on a case-by-case basis to determine how to achieve the lowest possible leachate head; and by complying with the environmental monitoring and corrective action requirements for groundwater and surface water.*

There are no changes required or requested to Special Provision #22.

2.4 NEW PERMIT AMENDMENTS REQUESTS

The Clinton County Sanitary Landfill (East) does not have any current new permit amendment requests.

2.5 EQUIVALENCY REVIEW REQUESTS

The Clinton County Sanitary Landfill (East) does not have any current equivalency review requests.

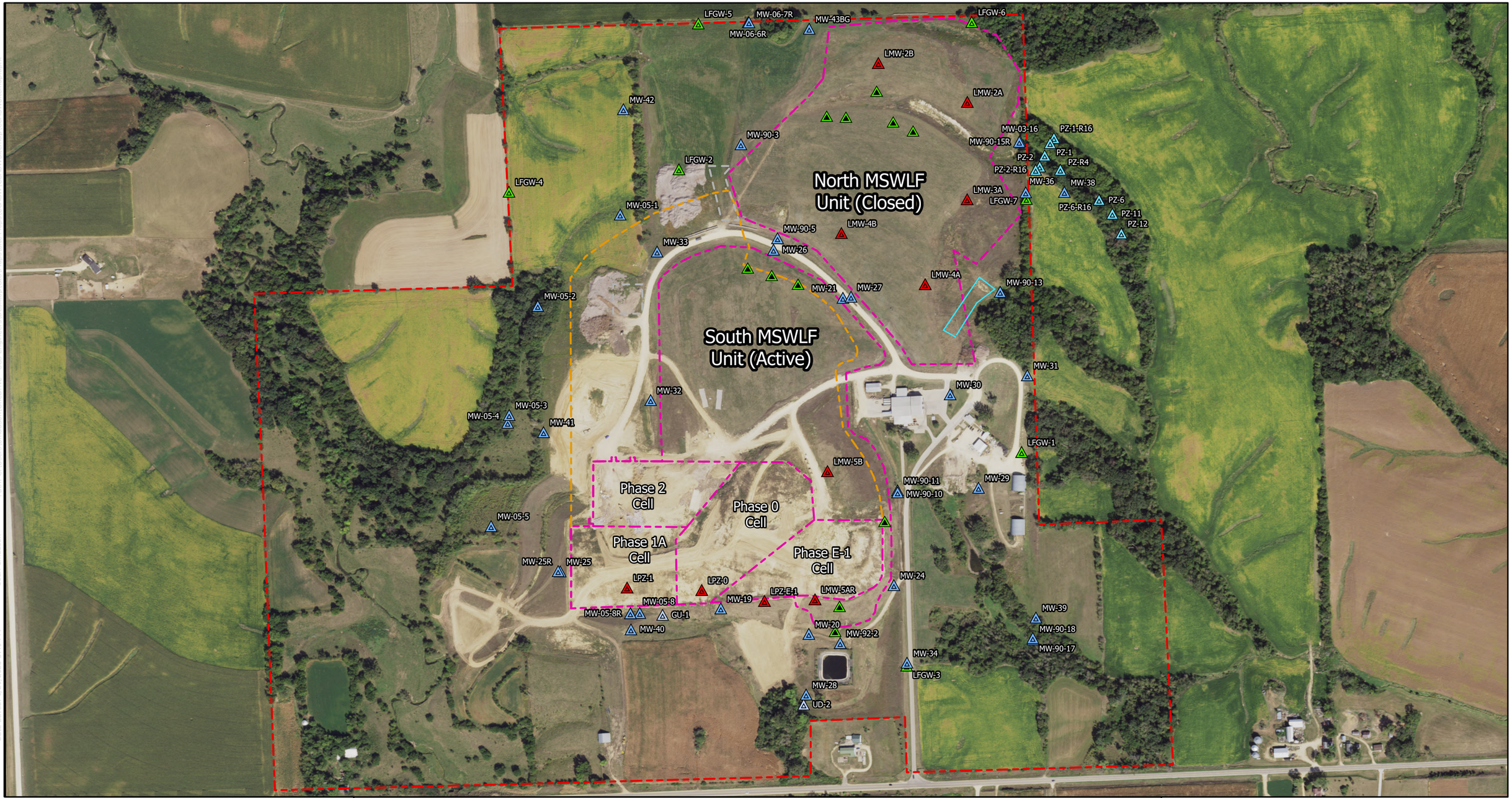
2.6 NEW VARIANCE REQUESTS

The Clinton County Sanitary Landfill (East) does not have any new variance requests from Iowa Administrative Code requirements.

2.7 REQUIRED PLANS AND SPECIFICATIONS

Appendices are included to address the updates as noted in Section 2 of Form 50 (included in Section 1 of this document). Updated plans, documentation, and information are found as follows:

- Appendix A Organizational Chart
- Appendix B Development and Operations Plan
- Appendix C Emergency Response and Remedial Action Plan
- Appendix D Proof of Financial Assurance
- Appendix E Comprehensive Plan



Site Map

Legend

- Monitoring Well
- Groundwater Underdrain
- Groundwater Piezometer
- Leachate Monitoring Location
- Landfill Gas Monitoring Point
- Gas Vent
- Petroleum Contaminated Soils Area
- Interceptor Trench
- Approximate Current Waste Boundary
- Approximate Future Waste Boundary
- Approximate Property Boundary

Clinton County Sanitary Landfill
East MSWLF Unit
Clinton, Iowa
Project No: 27223133.25
Drawing Date: April 2025

N
W
E
S

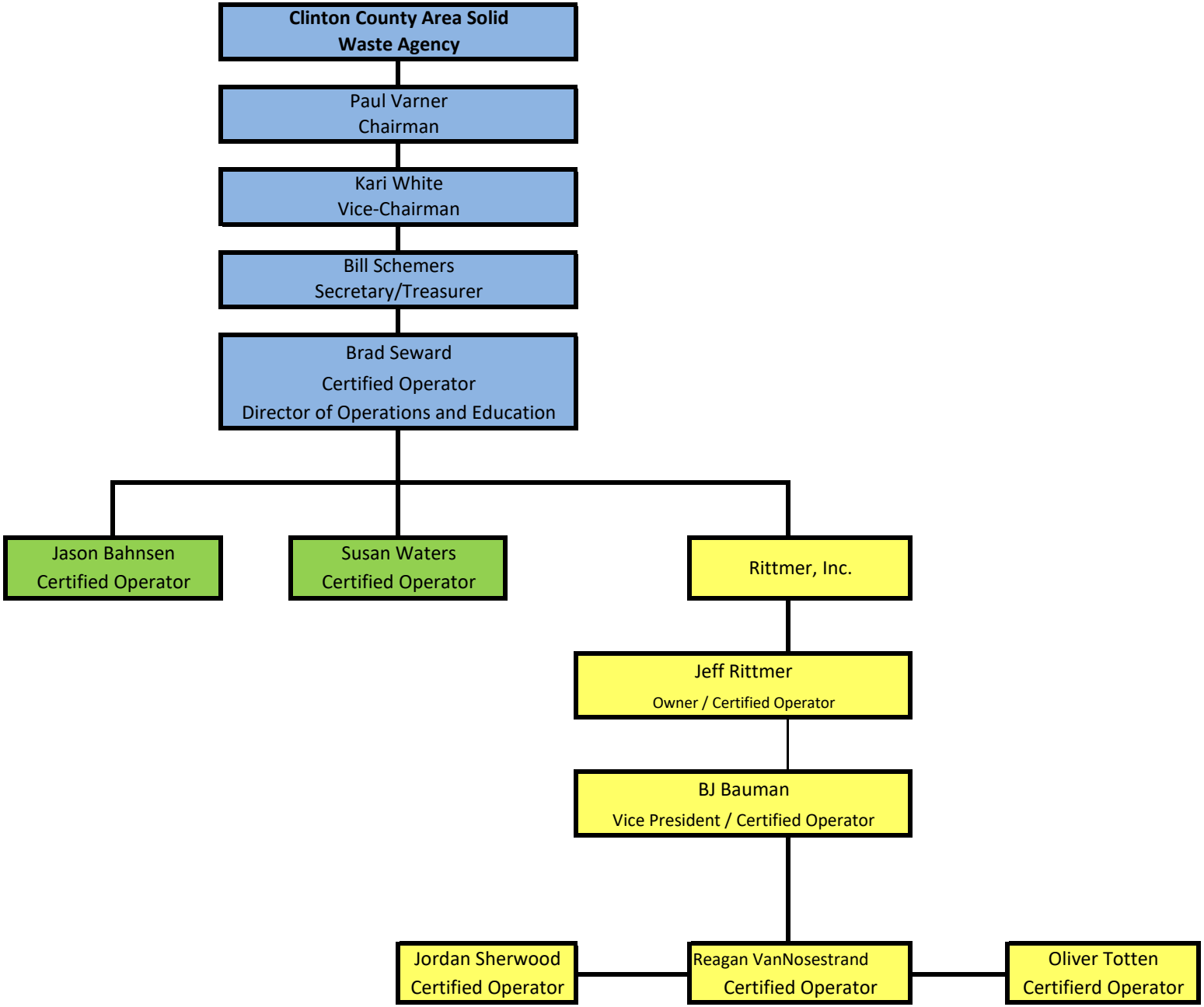
0 375 750 1,500 Feet

Figure 1-1

SCS ENGINEERS
environmental consultants and contractors

Appendix A

Organizational Chart



Notes:

1. The organizational chart is subject to change without prior notification to the DNR.

Appendix B

Development and Operations Plan

Development and Operations Plan (DOPS) Update

Clinton County Sanitary Landfill (East)
DNR Permit No. 23-SDP-01-74P

Clinton County Area Solid Waste Agency
4292 220th St.
Clinton, IA 52732

SCS ENGINEERS

Project No. 27225264.00 | July 2025

1690 All State Court, Suite 100
West Des Moines, IA 50265
(515) 631-6160

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Section Page

Figures

Attachments

1.0 INTRODUCTION

The purpose of this document is to provide a consolidated delineation of the operating requirements for the Clinton County Sanitary Landfill (Landfill) for compliance with the 567 Iowa Administrative Code (IAC) Chapter 113 – Sanitary Landfills for Municipal Solid Waste: Groundwater Protection Systems for the Disposal of Nonhazardous Wastes (new 567-113(455B)).

2.0 BACKGROUND

The Clinton County Sanitary Landfill (East Site) consists of the North municipal solid waste landfill (MSWLF) unit and the South MSWLF unit. The South MSWLF unit currently consists of the areas shown on Figure 1-1. The current footprint of the South MSWLF unit covers approximately 51 acres, which includes the closed area (41 acres) and the current active area (10 acres). The approved expansion area covers approximately 37 acres. The total approved area of the South MSWLF units is approximately 88 acres.

The North MSWLF unit is located in the northern portion of the Landfill (East Site) property. The North MSWLF unit is closed and covers approximately 38.1 acres.

The Landfill property is depicted in Figure 1-1, Site Map. The Clinton County Sanitary Landfill property consists of approximately 330 acres located along 220th Street, approximately 5 miles west of Clinton, Iowa and is located within the S ½, NE ¼; E ½, SW ¼; and the SE ¼ of Section 33, in Township 82 North, Range 6 East, in Clinton County, Iowa.

3.0 APPROACH

The approach employed for the development of a Development and Operations Plan (DOPs) for the Clinton County Sanitary Landfill was to review and incorporate those portions of the 567-113(455B) rules defined therein as the DOPs pursuant to subrule 113.8(4). The DOPs consists of the requirements contained in subrules 113.8(1) through 113.8(3). Each subrule's content is reiterated herein followed by a compliance response.

4.0 PLAN CONTENTS

113.8(4) *Development and Operations Plan (DOPs). Updates will be maintained in the current Form 50:*

Responsible Official

b. Telephone number of the official responsible for the operation of the facility and an emergency contact person if different.

Contact: Brad Seward, Clinton County Area Solid Waste Agency
Phone: (563) 243-4749

Service Area

c. Service area of the facility and political jurisdictions include in that area.

All cities and the unincorporated areas of Clinton County.

Days and Hours of Operation of the Facility

d. Days and hours of operation of the facility.

Monday-Friday: 7:30 A.M. to 4:30 P.M. and Saturday: 7:30 A.M. to 12:00 P.M.

5.0 PROHIBITED OPERATIONS AND ACTIVITIES – 113.8(1)

113.8 (1) *Prohibited operations and activities. For the purposes of this subrule, "regulated hazardous waste" means a solid waste that is a hazardous waste, as defined in Iowa Code section 455B.411.*

Waste Screening for Prohibited Materials

a. Waste screening for prohibited materials. Owners or operators of all MSWLF units must implement a program at the facility for detecting and preventing the disposal of regulated hazardous wastes, polychlorinated biphenyls (PCB) wastes and other prohibited wastes listed in paragraph 113.8(1)"b." This program must include, at a minimum:

The waste screening for prohibited materials program described below has been implemented at the Landfill.

Random Inspections of Incoming Loads

(1) Random inspections of incoming loads unless the owner or operator takes other steps to ensure that incoming loads do not contain regulated hazardous wastes, PCB wastes or other prohibited wastes listed in paragraph 113.8(1)"b";

The Clinton County Landfill is operated by a Contract Operator. Per contract, the Contract Operator will perform one random load inspection event per week during regular operating hours.

In addition to the random load inspections, the following measures will also be employed on a regular basis:

1. Scale attendants will visually scan incoming vehicles while on the weigh scale.

2. Facility personnel will visually scan waste disposed of at the public drop-off area during working hours.

3. During clean-up events, facility personnel, including extra staffing, will police the area and help customers unload.

4. Facility personnel will look for evidence of smoke, fire, heat, or suspicious looking containers, hazardous waste labels, colors, and other evidences of hazardous or inappropriate waste including chemical or strong odors.

5. At the landfill working face, the equipment operator will scan the tipped waste for similar evidences of hazardous wastes. If suspicious looking waste is observed while it is still in the vehicle, the Director or designee will be summoned to

observe the vehicle and question the driver. In the event suspicious waste has been tipped, the operator will attempt to communicate with the driver of the vehicle. In addition, the person observing the suspicious looking waste will take note of the vehicle type and license number of the vehicle and notify the Director.

Records of Inspections

(2) Records of any inspections;

The Contract Operator will complete all applicable areas of the load-checking form (see **Attachment A**) and then sign and date the form in the appropriate areas. The Contract Operator will also attempt to have the vehicle driver/customer sign the load-checking form. After the load-checking form is completed, it will be submitted to the Director with the Contract Operator's monthly report and filed at the landfill office. Photographs, manifests, or other documentation related to the load inspection will be attached to the load-checking form. Related documentation should be adequately identified in case it becomes disassociated from the form.

The load-checking forms and associated information will be retained at the facility or as required pursuant to 113.11(1) and made available to the department for inspection at all reasonable times pursuant to 113.11(2).

Training of Facility Personnel

(3) Training of facility personnel to recognize regulated hazardous wastes, PCB wastes and other prohibited wastes listed in paragraph 113.8(1)"b"; and

Facility personnel will receive annual training regarding the recognition of regulated hazardous wastes, PCB wastes, and other prohibited wastes listed in paragraph 113.8(1)"b". Additionally, new facility personnel will receive the same training within 30 days of hire and will be included in the annual training thereafter.

Notification of the EPA Regional Administrator

(4) Notification of the EPA regional administrator if regulated hazardous wastes or PCB wastes are discovered at the facility.

If a regulated hazardous waste or a PCB waste is discovered at the facility, the Director will be notified who will in turn notify the EPA Regional Administrator.

Materials Prohibited from Disposal

b. Materials prohibited from disposal. The following wastes shall not be accepted for disposal by an MSWLF. Some wastes may be banned from disposal via the multiple categories listed below.

The material categories listed below are prohibited from disposal at the Landfill.

Hazardous Waste

> *(1) Hazardous waste, whether it is a chemical compound specifically listed by EPA as a regulated hazardous waste or a characteristic hazardous waste pursuant to the characteristics below:*
>
> *1. Ignitable in that the waste has a flash point (i.e., it will ignite) at a temperature of less than 140 degrees Fahrenheit.*
>
> *2. Corrosive in that the waste has a pH less than 2 or greater than 12.5.*
>
> *3. Reactive in that the waste is normally unstable; reacts violently with water; forms an explosive mixture with water; contains quantities of cyanide or sulfur that could be released into the air in sufficient quantity to be a danger to human health; or can easily be detonated or exploded.*
>
> *4. Toxicity characteristic leaching procedure (TCLP) (EPA Method 1311) toxic, in that a TCLP listed chemical constituent exceeds the EPA assigned concentration standard in 40 CFR Part 261 or the department assigned concentration standard in Table I of rule 113.7(455B). Waste from a residential building that is contaminated by lead–based paint (i.e., the waste fails the TCLP test for lead only) may be disposed of in an MSWLF unit. The purpose of this exclusion is to help prevent the exposure of children to lead–based paint. Therefore, the meaning of "residential building" in regard to this TCLP exclusion shall be interpreted broadly and include any building which children or parents may utilize as a residence (temporarily or permanently). Such residential buildings include, but are not limited to, single family homes, apartment buildings, townhomes, condominiums, public housing, military barracks, nursing homes, hotels, motels, bunkhouses, and campground cabins.*

Hazardous wastes, either listed or by characteristic, will not be accepted for disposal at the Clinton County Sanitary Landfill. The facility is permitted to accept, at their regional collection center (RCC) under Permit No. 23-SDP-08-94P-HHM (Clinton County HMM RCC), eligible household hazardous material (HHM) and hazardous wastes from conditionally exempt small quantity generators (CESQG) from the communities and rural areas of Clinton, Cedar, Jackson, and Jones Counties. All eligible wastes collected at this facility will be temporarily stored in 55-gallon drums or totes to be kept inside the approved building. Periodically, the wastes will be properly lab-packed and transported to a permitted hazardous waste disposal facility. Hazardous material will not be stored for longer than 180 days.

Polychlorinated Biphenyl (PCB) Wastes

(2) Polychlorinated biphenyl (PCB) wastes with a concentration equal to or greater than 50 parts per million (ppm).

PCB wastes with a concentration equal to or greater than 50 ppm will not be accepted for disposal at the Clinton County Sanitary Landfill.

Free Liquids, Liquid Waste and Containerized Liquids

(3) Free liquids, liquid waste and containerized liquids. For purposes of this subparagraph, "liquid waste" means any waste material that is determined to contain "free

liquids" as defined by Method 9095B (Paint Filter Liquids Test), as described in Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods (EPA Pub. No. SW–846). For the purposes of this subparagraph, "gas condensate" means the liquid generated as a result of the gas recovery process(es) at the MSWLF unit. However, free liquids and containerized liquids may be placed in MSWLF units if:

1. The containerized liquid is household waste other than septic waste. The container must be a small container similar in size to that normally found in household waste;

2. The waste is leachate or gas condensate derived from the MSWLF unit, whether it is a new or existing MSWLF unit or lateral expansion, and is designed with a composite liner and leachate collection system as described in paragraph 113.7(5)"a." The owner or operator must demonstrate compliance with this subparagraph and place the demonstration in the operating record; or

3. The MSWLF unit is a research, development and demonstration (RD&D) project in which the department has authorized the addition of liquids and meets the applicable requirements of subrule 113.4(10).

Free liquids, liquid waste, or containerized liquids will not be accepted for disposal at the Clinton County Sanitary Landfill unless the liquid is household waste other than septic waste and held in a container similar in size to that normally found in household waste, or the liquid is leachate or gas condensate derived from the MSWLF unit, or if the MSWLF unit is a RD&D project authorized to accept the addition of liquids and meets the requirements of subrule 113.4(10).

Septage

(4) Septage, which is the raw material, liquids and pumpings from a septic system, unless treated pursuant to 567—Chapter 68.

Septage will not be accepted for disposal at the Clinton County Sanitary Landfill unless treated pursuant to 567-Chapter 68.

Appliances

(5) Appliances as defined pursuant to 567—Chapter 118, unless there is documentation that the appliance has been demanufactured pursuant to 567—Chapter 118.

Appliances will not be disposed of at the Clinton County Sanitary Landfill. Appliances are temporarily stored in an area designated by the Director. No discarded appliance will be stored for more than 270 days without being demanufactured. No discarded appliance will be stored for more than a total of twelve (12) months, including demanufacturing processing, prior to being recycled/salvaged. The operator and salvaging contractor will comply with applicable provision of 567-Chapter 118 and the General Provisions of the operating permit. No scavenging will be allowed.

Radioactive Waste

> *(6) Radioactive waste, excluding luminous timepieces and other items using very small amounts of tritium.*

Radioactive waste, excluding luminous timepieces and other items using very small amounts of tritium, will not be accepted for disposal at the Clinton County Sanitary Landfill.

Infectious Waste

> *(7) Infectious waste, unless managed and disposed of pursuant to 567—Chapter 109.*

Infectious waste, unless managed and disposed of pursuant to 567-Chapter 109 and in accordance with the facility's Special Waste Authorization (SWA) and approved Special Waste Acceptance Criteria (SWAC), will not be accepted for disposal at the Clinton County Sanitary Landfill.

Hot Loads

> *(8) Hot loads, meaning solid waste that is smoking, smoldering, emitting flames or hot gases, or otherwise indicating that the solid waste is in the process of combustion or close to igniting. Ash that has not been fully quenched or cooled is considered a hot load. Such wastes may be accepted at the gate, but shall be segregated and completely extinguished and cooled in a manner as safe and responsible as practical before disposal.*

Hot loads as indicated by the presence of solid waste that is smoking, smoldering, emitting flames or hot gasses, or otherwise indicating that the solid waste is in the process of combustion or close to igniting or containing ash that has not been fully quenched or cooled will not be accepted for disposal at the Clinton County Sanitary Landfill.

If hot loads are delivered to the Clinton County Sanitary Landfill, facility personnel will either reject the load or, in the interest of public safety as determined by the Director, accept and segregate the load and completely extinguish and cool the load in a manner as safe and responsible as practical before disposal.

Asbestos-Containing Material (ACM) Waste

> *(9) Asbestos–containing material (ACM) waste with greater than 1 percent asbestos, unless managed and disposed of pursuant to 567—Chapter 109.*

ACM waste with greater than 1 percent asbestos, unless managed and disposed of pursuant to 567-Chapter 109 and in accordance with the facility's SWAC, will not be accepted for disposal at the Clinton County Sanitary Landfill.

Petroleum-Contaminated Soil

> *(10) Petroleum–contaminated soil, unless managed and remediated pursuant to 567—Chapter 120.*

Petroleum-Contaminated Soil (PCS), unless managed and remediated pursuant to 567-Chapter 120, will not be accepted for disposal at the Clinton County Sanitary Landfill.

Grit and Bar Screenings and Grease Skimmings

> *(11) Grit and bar screenings, and grease skimmings, unless managed and disposed of pursuant to 567—Chapter 109.*

Grit and bar screenings and grease skimmings, unless managed and disposed of pursuant to 567-Chapter 109 and in accordance with the facility's SWAC, will not be accepted for disposal at the Clinton County Sanitary Landfill.

Waste Tires

> *(12) Waste tires, unless each tire is processed into pieces no longer than 18 inches on any side. The department encourages the recycling of all waste tires, even if processed to disposal standards.*

Waste tires, unless each tire is processed into pieces no longer than 18 inches on any side, will not be accepted for disposal at the Clinton County Sanitary Landfill. Waste tires are temporarily stored up to a maximum of 1,500 waste tire equivalents for the purpose of reclamation processing or disposal. Tire storage and processing are conducted at approved plan locations. The tires will be removed at least once every 120 days and transported to the appropriate reclaimer/processor, or properly disposed of or reused at the site. It is the goal of the Clinton County Area Solid Waste Agency to recycle waste tires.

Yard Waste

> *(13) Yard waste.*

Yard waste will not be accepted for disposal at the Clinton County Sanitary Landfill.

The Clinton County Sanitary Landfill is permitted to collect and process grind or chip trees, limbs, brush, and clean wood wastes free of coatings and preservatives for the purposes of reuse as bedding material, mulch, soil conditioner, compost bulking material, or for other beneficial reuses, in accordance with the following:

- Trees, limbs, brush, and clean wood wastes will not be stored for a period exceeding twelve (12) months before processing;
- Ground or chipped materials will not be allowed to accumulate such that the stockpiles are not completely reused within twelve (12) months of initial stockpiling;
- The processed materials may be used as mulch or soil conditioner for off-site purposes and on landfill areas with intermediate and final cover and on soil borrow areas; and
- Mulch or soil conditioner applied to existing vegetated landfill areas will be applied at a rate such that established vegetation is not adversely impacted by its use.

The Clinton County Sanitary Landfill is permitted to compost yard waste in an area designated for composting activities. All composting activities will be in accordance with 567-Chapter 105.

Lead-Acid Batteries

(14) Lead–acid batteries.

Lead-acid batteries will not be accepted for disposal at the Clinton County Sanitary Landfill. Lead-acid batteries are accepted at the Landfill and temporarily stored for recycling purposes. The lead-acid batteries are stored in a designated area that curtails the movement of acids and provides proper ventilation of gases from the batteries. Lead-acid batteries will not be stored on-site for longer than twelve (12) months.

Waste Oil and Materials Containing Free-Flowing Waste Oil

(15) Waste oil and materials containing free–flowing waste oil. Materials contaminated with waste oil may be disposed of if no free–flowing oil is retained in the material, and the material is not a hazardous waste.

Waste oil and materials containing free-flowing waste oil will not be accepted for disposal at the Clinton County Sanitary Landfill. Waste oil and materials containing free-flowing waste oil are temporarily stored for recycling purposes. The storage tanks will be designed and maintained to prevent the spillage or discharge of waste oil. Absorbent material will be available at the tank site for use by the operator to control waste oil spillage or discharge. The maximum length of time for storage is twelve (12) months.

Baled Solid Waste

(16) Baled solid waste, unless the waste is baled on site after the waste has been visually inspected for prohibited materials.

Baled solid waste will not be accepted for disposal at the Clinton County Sanitary Landfill.

Open Burning and Fire Hazards

c. Open burning and fire hazards. No open burning of any type shall be allowed within the permitted boundary of an MSWLF facility. The fueling of vehicles and equipment, and any other activity that may produce sparks or flame, shall be conducted at least 50 feet away from the working face.

No open burning of any type will be allowed within the permitted boundary of the Clinton County Sanitary Landfill. The fueling of vehicles and equipment and any other activities that may produce sparks or flames will be conducted at least 50 feet away from the working face.

Scavenging and Salvaging

d. Scavenging and salvaging. Scavenging shall not be allowed at the MSWLF facility. However, salvaging by MSWLF operators may be allowed.

Scavenging is not permitted at the Clinton County Sanitary Landfill. Clinton County Sanitary Landfill personnel are allowed to salvage materials from the waste stream.

Animal Feeding and Grazing

> e. *Animal feeding and grazing. Feeding animals MSW shall not be allowed at an MSWLF facility. The grazing of domestic animals on fully vegetated areas of the MSWLF facility not used for disposal, including closed MSWLF units, may be allowed by the department so long as the animals do not cause damage or interfere with operations, inspections, environmental monitoring and other required activities. Large, hoofed animals (including but not limited to buffalo, cattle, llamas, pigs, and horses) shall not be allowed on closed MSWLF units.*

Animal feeding and grazing is not allowed within the permitted boundary of the Clinton County Sanitary Landfill.

6.0 DISPOSAL OPERATIONS AND ACTIVITIES – 113.8(2)

113.8(2) Disposal operations and activities. All MSWLFs shall comply with the following requirements.

Survey Control and Monuments

> a. *Survey controls and monuments. Survey controls and monuments shall be maintained as follows.*

Survey controls and monuments at the Clinton County Sanitary Landfill will be maintained pursuant to 113.8(2)"a".

Property, Permitted, and MSWLF Unit Boundaries

> (1) *The property boundary, the permitted boundary and the boundaries of all MSWLF units shall be surveyed and marked by a professional land surveyor at least once prior to closure.*

The property boundary and the permitted boundary at the Clinton County Sanitary Landfill are the same. These boundaries will be surveyed and marked by a professional land surveyor prior to closure and included in Attachment B.

New MSWLF Unit Boundaries

> (2) *Prior to waste placement, all new MSWLF unit boundaries shall be surveyed and marked by a professional engineer.*

The cell boundaries have been surveyed and marked prior to waste placement. The marking of the boundary of the cell will be reviewed by a professional engineer.

Survey Monument Establishment

(3) Survey monuments shall be established to check vertical elevations and the progression of fill sequencing. The survey monuments shall be established and maintained by a professional land surveyor.

In the summer of 2014, Barker Lemar and Associates authorized Snyder & Associates to create a survey control network to be used by the Clinton County Landfill and area consultants The following control points are established at the facility and are shown on Table 1:

Control Point	Northing	Easting	Elevation
CP1	695908.02	2523435.5	698.31
CP2	697709.45	2520827.88	720.32
CP3	697443.02	2523415.94	713.29
CP4	693901.25	2523578.34	690.14
CP5	693744.50	2519593.4	692.24
CP6	694816.36	2520371.81	659.57

Survey monuments will be established and maintained by a professional land surveyor. The coordinate and elevation information of the survey monuments will be maintained in the operating record.

Survey Monument Marking

(4) All survey stakes and monuments shall be clearly marked.

The survey stakes and monuments will be clearly marked when placed. The coordinate and elevation information of the survey monuments will be maintained in the operating record.

Survey Monument Inspection

(5) A professional engineer shall biennially inspect all survey monuments and replace missing or damaged survey monuments.

The survey monuments will be inspected biennially by a professional engineer or by a surveyor under the direction of a professional engineer. If a survey monument is missing or damaged, the monument will be repaired or replaced under the direction of a professional land surveyor.

First Lift Placement

b. First lift. The first lift and initial placement of MSW over a new MSWLF unit liner and leachate collection system shall comply with the following requirements.

Construction of the first lift and the initial placement of MSW over a new MSWLF unit liner and leachate collection system at the Clinton County Sanitary Landfill will comply with the requirements of 113.8(2)"b".

QC&A Report Submittal

(1) Waste shall not be placed in the new MSWLF unit until the QC&A officer has submitted a signed and sealed final report to the department pursuant to paragraph 113.7(6)"d" and that report has been approved by the department.

Waste will not be placed in new MSWLF units at the Clinton County Sanitary Landfill until the QC&A officer has submitted a signed and sealed final report to the department pursuant to paragraph 113.7(6)"d" and the report has been approved by the department.

Equipment Operation on Liner and Leachate Management System

(2) Construction and earth moving equipment shall not operate directly on the liner and leachate management system. Waste disposal operations shall begin at the edge of the new MSWLF unit by pushing MSW out over the liner and leachate collection system. Compactors and other similarly heavy equipment shall not operate directly on the leachate collection system until a minimum of 4 feet of waste has been mounded over the top of the leachate collection system.

When a new MSWLF unit is opened at the Clinton County Sanitary Landfill, construction and earth moving equipment will not operate directly on the liner and leachate management system. Waste disposal operations will begin at the edge of the new MSWLF unit and progress by placing MSW out over the liner and leachate collection system. Compactors or other similarly heavy equipment will not operate directly on the leachate collection system until a minimum of 4 feet of waste has been placed over the top of the leachate collection system.

Materials Prohibited from First Lift

(3) Construction and demolition debris and materials clearly capable of spearing through the leachate collection system and liner shall not be placed in the first 4 feet of waste over the top of the leachate collection system. The first 4 feet of waste shall consist of select waste that is unlikely to damage the liner and performance of the leachate collection system.

Construction and demolition debris and materials clearly capable of spearing through the leachate collection system and liner will not be placed in the first 4 feet of waste over the top of the leachate collection system. Only select waste that is unlikely to damage the liner and performance of the leachate collection system will be placed in the first 4-foot thick lift of waste placed in new MSWLF units.

Freeze/Thaw Documentation

(4) The owner or operator must place documentation in the operating record and submit a copy to the department that adequate cover material was placed over the top of the leachate collection system in the MSWLF unit or that freeze/thaw effects had no adverse impact on the compacted clay component of the liner.

The Agency proposes to comply with rule by implementing the criteria set forth by the department according to its memo dated September 26, 2012, which provides the following:

Except for portions of the sideslope greater than 10 feet above the base liner, a layer of solid waste at least 4 feet thick, or an adequate amount of other frost protection material, shall be placed over the leachate collection system in all portions of the lined area prior to December 31st of the year following the year the clay portion of the liner was constructed. After this date, solid waste may not be placed on any portion of the base liner or lower 10 feet of the sideslope not covered with a 4-foot thick layer of solid waste or other adequate frost protection material. Those portions of the base liner or lower 10 feet of sideslope not covered with a 4-foot thick layer of solid waste or other frost protection material by this date shall be investigated for density and effects from freeze-thaw as specified by the department and shall be repaired and recertified during the next construction season if required, prior to waste placement.

Fill Sequencing

c. Fill sequencing. The rate and phasing of disposal operations shall comply with the following requirements.

The rate and phasing of disposal operations at the Clinton County Sanitary Landfill will comply with the requirements of 113.8(2)"c".

Fill Sequencing for Proper Operation and System Protection

(1) The fill sequencing shall be planned and conducted in a manner and at a rate that do not cause a slope failure, lead to extreme differential settlement, or damage the liner and leachate collection system.

Fill sequencing is planned on a MSWLF unit to MSWLF unit basis showing the limits (vertically and horizontally) where MSW filling is to occur and how much for the phase, the limits (vertically and horizontally) from where borrow soils are to be obtained and how much for the phase, leachate management system development progression through the phases, temporary and permanent storm water management structures through the phases, and temporary and permanent access roads through the phases. The fill sequencing plan is designed to increase efficiency of the operation by planning the configuration and timing of the development and is designed to reduce the likelihood of slope failure, extreme differential settlement, or damage to the liner and leachate collection system.

The MSWLF unit boundaries will be staked to delineate the allowable limits of fill. Fill stakes for the MSWLF unit and cut stakes for the borrow areas will be set as needed to direct the equipment operators to stay within the fill sequencing plan.

Fill Sequencing for Storm Water and Surface Water Requirements

(2) The fill sequencing shall be planned and conducted in a manner compliant with the run–on and runoff requirements of subrule 113.7(8) and surface water requirements of rule 113.10(455B).

Storm water controls at the Clinton County Sanitary Landfill have been designed to prevent run-on onto the active portion of the landfill during the peak discharge from a 25-year storm and to collect and control the run-off volume from the active portion of the landfill from a 24-hour, 25-year storm.

The Storm Water Pollution Prevention Plan (SWPPP) for the Clinton County Sanitary Landfill prepared as required for coverage under National Pollutant Discharge Elimination System (NPDES) General Permit No. 1 is intended to prevent the discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Action pursuant to Section 402 of the Clean Water Act and to prevent the discharge of a nonpoint source of pollution into waters of the United States, including wetlands, that violates any requirement of an areawide or statewide water quality management plan that has been approved under Section 208 or 319 of the Clean Water Act.

Working Face

d. Working face. The working face shall comply with the following requirements.

The working face at the Clinton County Sanitary Landfill will comply with the requirements of 113.8(2)"d".

Size of Working Face

(1) The working face shall be no larger than necessary to accommodate the rate of disposal in a safe and efficient manner.

Waste arriving at the facility will be disposed of at the working face. The size of the working face will be determined on a daily basis by the Contract Operator. The size will be dependent upon the expected maximum number of commercial trucks that will be unloading at one time. A compactor truck typically requires a 15- to 18-foot wide unloading area. Beyond the space requirements for unloading, the working face size will be kept to a minimum to reduce litter and daily cover soil or alternative daily cover (ADC) use thereby increasing the efficiency of the operation. The working face will be managed by uniformly spreading solid waste in layers 1-2 feet in depth.

Steepness of Working Face

(2) The working face shall not be so steep as to cause heavy equipment and solid waste collection vehicles to roll over or otherwise lose control.

The slope of the working face will be maintained at a slope that will not cause heavy equipment and waste collection vehicles to roll over or otherwise lose control. Since a steel-wheeled compactor is used at the site, the working face will be constructed in flatter rather than steeper lifts. Flatter lifts generally allow a steel-wheeled compactor to travel faster, make more passes, and thereby achieve greater compaction with less work.

Litter Control Devices

(3) Litter control devices of sufficient size to help prevent blowing litter shall be utilized at the working face. The operation of the working face shall attempt to minimize blowing litter.

Litter control devices of sufficient size to help prevent blowing litter will be utilized at the working face. Additionally, perimeter fencing, litter fencing beyond the working face, and hand-picking are used at the Clinton County Sanitary Landfill for litter control on an as-needed basis.

As mentioned in Section 3.4.1, the size of the working face will be kept to a reasonable minimum to attempt to minimize blowing litter. Additionally, if necessary, tipped loads will be pushed short to reduce rolling and tumbling of the garbage thereby reducing the generation of litter. Loads with a high likelihood of generating litter, if possible, will be tipped on the lee side of larger loads allowing the larger load to act as a windbreak.

Vector Harborage and Attraction

(4) The operation of the working face shall prevent the harborage of vectors and attempt to minimize the attraction of vectors.

Flies, other insects, rodents, and other vermin are controlled by applying at least six inches of compacted cover or approved ADC in accordance with the manufacturer's specifications over the working face at the conclusion of each day's operation.

Prohibited Waste Recognition

(5) Employees at the working face shall be trained to visually recognize universal symbols, markings and indications of prohibited wastes pursuant to paragraph 113.8(1)"b."

Concurrent with the training described in Section 2.1.3, facility staff at the tipping floor of the Composting Facility or the landfill working face will be trained to visually recognize universal symbols, markings, and indication of prohibited wastes pursuant to paragraph 113.8(1)"b".

Special Wastes

e. Special wastes. Special wastes shall be managed and disposed of pursuant to 567—Chapter 109.

Special wastes will be managed and disposed of at the Clinton County Sanitary Landfill pursuant to 567-Chapter 109. The disposal of special wastes and general special wastes will be conducted in conformance with the Clinton County Sanitary Landfill's current SWA and approved SWAC on file with the department. Prior to the acceptance of new types of special wastes or general special wastes, the necessary SWA issuance and SWAC approval process will be completed through the department.

Cover Material and Alternative Cover Material

f. Cover material and alternative cover material. Pursuant to 567—Chapter 108, alternative cover material of an alternative thickness (e.g., tarps, spray covers) may be authorized if the owner or operator demonstrates to the approval of the department that the alternative material and thickness control vectors, fires, odors, blowing litter, and scavenging without presenting a threat to human health and the environment. Cover material or alternative cover material shall be available for use during all seasons in all types of weather. Cover material and alternative cover material shall be utilized as follows unless otherwise approved by the department pursuant to 567—Chapter 108:

The Clinton County Sanitary Landfill is currently permitted to utilize the following alternative cover materials in accordance with the permit requirements:

- A de-watered industrial process sludge produced by Equistar Chemicals LP in combination with soil as daily and intermediate cover;
- *Typar*, a trade name geotextile manufactured by Exxon Chemical Company, as ADC;
- Biomass sludge from ADM (Clinton) mixed with soil as ADC on the regular working face and as alternative weekly cover on the C&D area;
- A homogeneous blended mixture of soil and foundry sand from Westwick Foundry Ltd. in Galena, Illinois as ADC;
- A homogeneous blended mixture of soil and foundry sand from Gray Powder Technologies in Muscatine, Iowa as ADC. The foundry sand delivered by Gray Powder Technologies is from Carroll Industry Model in Milledgeville, Illinois; Gibb's Machine in Collette, Illinois; H.A. International in Peoria, Illinois; and Precision Aluminum in Wilton, Iowa;
- A homogeneous blended mixture of soil and sandblast or coal combustion residue from ADM in Clinton, Iowa as ADC; and
- Mixed colored glass for ADC, of which, the maximum percentage of mixed glass in the daily cover blend shall not exceed 10% by volume.

Cover material or alternative cover materials will be available for use during all seasons in all types of weather at the Clinton County Sanitary Landfill.

Daily Cover

(1) Daily cover. Six inches of cover material or an approved depth or application of alternative cover material shall be placed and maintained over waste in the active portion at the end of each operating day, or at more frequent intervals if necessary, to control vectors, fires, odors, blowing litter, and scavenging.

At the conclusion of each day's operation, a minimum of six inches of cover material or an approved depth or application of an alternative cover material will be placed and maintained

over waste in the active portion of the landfill. Cover material or ADC will be available for use during all seasons in all types of weather at the Clinton County Sanitary Landfill.

Intermediate Cover

> *(2) Intermediate cover. At least 1 foot of compacted cover material or an approved depth or application of alternative cover material shall be placed and maintained over waste in the active portion that has not or will not receive more waste for at least 30 days. At least 2 feet of compacted cover material or alternative cover material shall be placed and maintained over waste in the active portion that has not or will not receive waste for at least 180 days. Such active portions shall be graded to manage run–on and runoff pursuant to subrule 113.7(8). Such active portions shall be seeded if they will not receive waste for a full growing season.*

At least 1 foot of compacted cover material (soil) will be placed and maintained over waste in the active portion of the landfill that has not or will not receive more waste for at least 30 days. At least 2 feet of compacted cover material (soil) will be placed and maintained over waste in the active portion of the landfill that has not or will not receive waste for at least 180 days. Areas that receive intermediate cover will be graded to manage run-on and runoff pursuant to subrule 113.7(8). Additionally, the area of intermediate cover that will not receive waste for a full growing season will be seeded.

Scarification of Cover

> *(3) Scarification of cover. To help prevent leachate seeps by aiding the downward flow of leachate, cover material or alternative cover material, which prevents the downward flow of leachate and is at least 5 feet from the outer edge of the MSWLF unit, shall be scarified prior to use of that area as a working face. Cover material or alternative cover material that does not impede the downward flow of leachate, as approved by the department, does not require scarification. Scarification may be as simple as the spearing or breaking up of a small area of the cover. Areas of intermediate cover may require removal of some of the cover material or alternative cover material to aid the downward flow of leachate.*

To help prevent leachate seeps by aiding the downward flow of leachate, cover materials or alternative cover material, which prevents the downward flow of leachate and is at least 5 feet from the outward edge of the MSWLF unit, will be scarified prior to use of that area as a working face. Cover material or alternative cover material that does not impede the downward flow of leachate, as approved by the department, will not be scarified. Scarification may be as simple as the spearing or breaking up of a small area of the cover. Areas of intermediate cover may require the removal of some of the cover material (soil) to aid the downward flow of leachate.

Final Cover

> *(4) Final cover. Final cover over an MSWLF unit that is to be closed shall be constructed and maintained according to the closure and postclosure requirements of rules 113.12(455B) and 113.13(455B).*

The final cover over MSWLF units at the Clinton County Sanitary Landfill will be constructed and maintained according to the closure and postclosure requirements of rules

113.12(455B) and 113.13(455B), respectively. It should be noted that for the construction of composite caps, a permeable layer has been added below the cap for passive gas collection to reduce the potential for uplift or whaling of the geomembrane component of the final cover. Additionally, a drainage layer has been added directly above the geomembrane component of the final cover to reduce the potential for build-up of fluids between the geomembrane component and the overlying soil component. The build-up of fluids at this interface greatly increases the potential for a slope failure of the final cap.

Leachate Seeps

> *g. Leachate seeps. Leachate seeps shall be contained and plugged upon being identified. Leachate seeps shall not be allowed to reach waters of the state. Soils outside of the MSWLF unit that are contaminated by a leachate seep shall be excavated and then disposed of within the MSWLF unit. Such soils may be used for daily cover material.*

Leachate seeps will be contained and plugged upon being identified. The method of plugging will include excavation of the seep area followed by packing with clay. If these measures are not sufficient to stop the seep from flowing, then an engineering design of an appropriate countermeasure specific to the situation will be developed. Leachate seeps will not be allowed to reach waters of the state. Soils outside of the MSWLF unit that are impacted by a leachate seep will be excavated and used within the MSWLF unit as daily cover material.

Leachate Recirculation

> *h. Leachate recirculation. The department must approve an MSWLF unit for leachate recirculation. The primary goal of the leachate recirculation system is to help stabilize the waste in a more rapid, but controlled, manner. The leachate recirculation system shall not contaminate waters of the state, contribute to erosion, damage cover material, harm vegetation, or spray persons at the MSWLF facility. Leachate recirculation shall be limited to MSWLF units constructed with a composite liner.*

The Clinton County Sanitary Landfill is not currently planning to recirculate leachate. A request will be sent that meets this requirement and the department's approval will be obtained prior to leachate recirculation.

Differential Settlement

> *i. Differential settlement. Areas of differential settlement sufficient to interfere with runoff and run–on shall be brought back up to the contours of the surrounding active portion. Differential settlement shall not be allowed to cause ponding of water on the active portion.*

Areas of differential settlement that are sufficient to interfere with proper runoff and run-on management of storm water or that are sufficient to cause ponding will be brought back up to the contours of the surrounding active portion.

7.0 FACILITY OPERATIONS AND ACTIVITIES – 113.8(3)

113.8(3) Facility operations and activities. All MSWLFs shall comply with the following requirements.

Controlled Access

e. Controlled access. Owners or operators of all MSWLF units must control public access and prevent unauthorized vehicular traffic and illegal dumping of wastes by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment.

Public access to the Clinton County Sanitary Landfill is restricted at the entrance gate to the facility. The gate is locked when an attendant or operators are not on duty. Unauthorized vehicular traffic and illegal dumping of wastes are controlled through perimeter fences, locked gates and chain barriers, and natural barriers such as the creek that traverses the landfill property and thick stands of trees.

Scales and Weights

f. Scales and weights. A scale certified by the Iowa department of agriculture and land stewardship shall weigh all solid waste collection vehicles and solid waste transport vehicles. The owner or operator shall maintain a record of the weight of waste disposed of.

A scale certified by the Iowa Department of Agriculture and Land Stewardship is used for weighing and recording solid wastes disposed of at the Clinton County Sanitary Landfill. The landfill will comply with the waste weighing, record keeping, and tonnage fee reporting requirements defined in 567 IAC 101.9(455B,455D). The landfill will also comply with the certification and licensing requirements of the Iowa Department of Agriculture and Land Stewardship. Periodic calibrations of the scale will occur as necessary and certification will be maintained current at all times.

The scale certification is included in **Attachment C**. A copy of renewed certification will be placed in the facility's operating record.

All-Weather Access to Disposal

g. All–weather access to disposal. A disposal area shall be accessible during all weather conditions.

An all-weather fill area will be maintained at the Clinton County Sanitary Landfill for solid waste disposal operation during all weather conditions. Internal roads will be maintained to provide all-weather access to the working face. Extreme weather conditions as discussed in the ERRAP may force the closure of the landfill for safety reasons preventing access to the disposal area.

Salvaged and Processed Materials

h. Salvaged and processed materials. Salvaged and processed materials (e.g., scrap metal, compost, mulch, aggregate, tire chips) shall be managed and stored in an orderly manner that does not create a nuisance or encourage the attraction or harborage of vectors.

The Clinton County Sanitary Landfill is permitted to accept, process, reuse, and/or temporarily store ground or chipped trees, limbs, brush, clean wood wastes free of coatings and preservatives, foundry sand, sandblast or coal combustion residue, mixed colored glass, waste tires, waste oil, antifreeze, brown goods, white goods, scrap metal, lead acid batteries, recyclable plastic farm pesticide containers, and eligible HHM and hazardous wastes from CESQGs in designated areas for permitted durations. These materials are managed and stored in accordance with the landfill's operational permit and in an orderly manner that does not create a nuisance or encourage the attraction or harborage of vectors.

Vector Control

i. Vector control. Owners or operators of all MSWLF units must prevent or control the on–site populations of vectors using techniques appropriate for the protection of human health and the environment.

The operation of the Clinton County Sanitary Landfill is conducted in such a manner as to prevent or control the on-site populations of vectors using techniques that are appropriate for the protection of human health and the environment. Flies, other insects, rodents, and other vermin are controlled by applying at least six inches of compacted cover or approved ADC in accordance with the manufacturer's specifications over the working face at the conclusion of each day's operation.

Litter Control

j. Litter control. The operator shall take steps to minimize the production of litter and the release of windblown litter off site of the facility. All windblown litter off site of the facility shall be collected daily unless prevented by unsafe working conditions. On–site litter shall be collected daily unless prevented by working conditions. A dated record of unsafe conditions that prevented litter collection activities shall be maintained by the facility.

The Clinton County Sanitary Landfill is managed in such a way as to reduce the production of litter and the release of windblown litter off-site of the facility. Perimeter fencing, litter fencing, and hand-picking are used for litter control. As mentioned in Section 3.4.1, the size of the working face will be kept to a reasonable minimum to attempt to minimize blowing litter. Additionally, if necessary, tipped loads will be pushed short to reduce rolling and tumbling of the garbage thereby reducing the generation of litter. Loads with a high likelihood of generating litter, if possible, will be tipped on the lee side of larger loads allowing the larger load to act as a windbreak.

Off-site windblown litter and on-site litter will be collected daily unless prevented by unsafe working conditions. A dated record of unsafe conditions that prevented litter collection activities will be

maintained by the Contract Operator and provided to the Director to be placed in the operating record.

Dust

k. Dust. The operator shall take steps to minimize the production of dust so that unsafe or nuisance conditions are prevented. Leachate shall not be used for dust control purposes.

The Clinton County Landfill staff and the Contract Operator will take steps to control the production of dust to reduce the likelihood that unsafe or nuisance conditions will result. Paved road extends from the entrance gate to the scale. Internal roads from the scale to landfill working face will be kept adequately rocked to reduce the generation of dust. Additionally, during extreme dry periods, a sap treatment may be used on rocked roads to control dust. Leachate will not be used for dust control purposes.

Mud

l. Mud. The operator shall take steps to minimize the tracking of mud by vehicles exiting the facility so that slick or unsafe conditions are prevented.

The Clinton County Sanitary Landfill staff will take steps to control the tracking of mud from vehicles exiting the facility to reduce the likelihood that slick or unsafe conditions will result. The access road to the scale is paved and internal roads from the scale to the landfill working face is well rocked. Mud on vehicles will be controlled through the maintenance of paved and well rocked all-weather internal roads to and from the working face.

Leachate and Wastewater Treatment

m. Leachate and wastewater treatment. The leachate management system shall be managed and maintained pursuant to the requirements of paragraph 113.7(5)"b." Leachate collection pipes shall be cleaned and inspected as necessary, but not less than once every three years. Leachate and wastewater shall be treated as necessary to meet the pretreatment limits, if any, imposed by an agreement between the MSWLF and a publicly owned wastewater treatment works (POTW) or by the effluent discharge limits established by an NPDES permit. Documentation of the POTW agreement or NPDES permit must be submitted to the department. All leachate and wastewater treatment systems shall conform to department wastewater design standards.

The leachate management system at the Clinton County Sanitary Landfill will be managed and maintained pursuant to the requirements of paragraph 113.7(5)"b". Leachate collection pipes will be cleaned as necessary but not less than every three years. If a line blockage is encountered or an observable loss of flow from the lines occurs, the lines will be inspected.

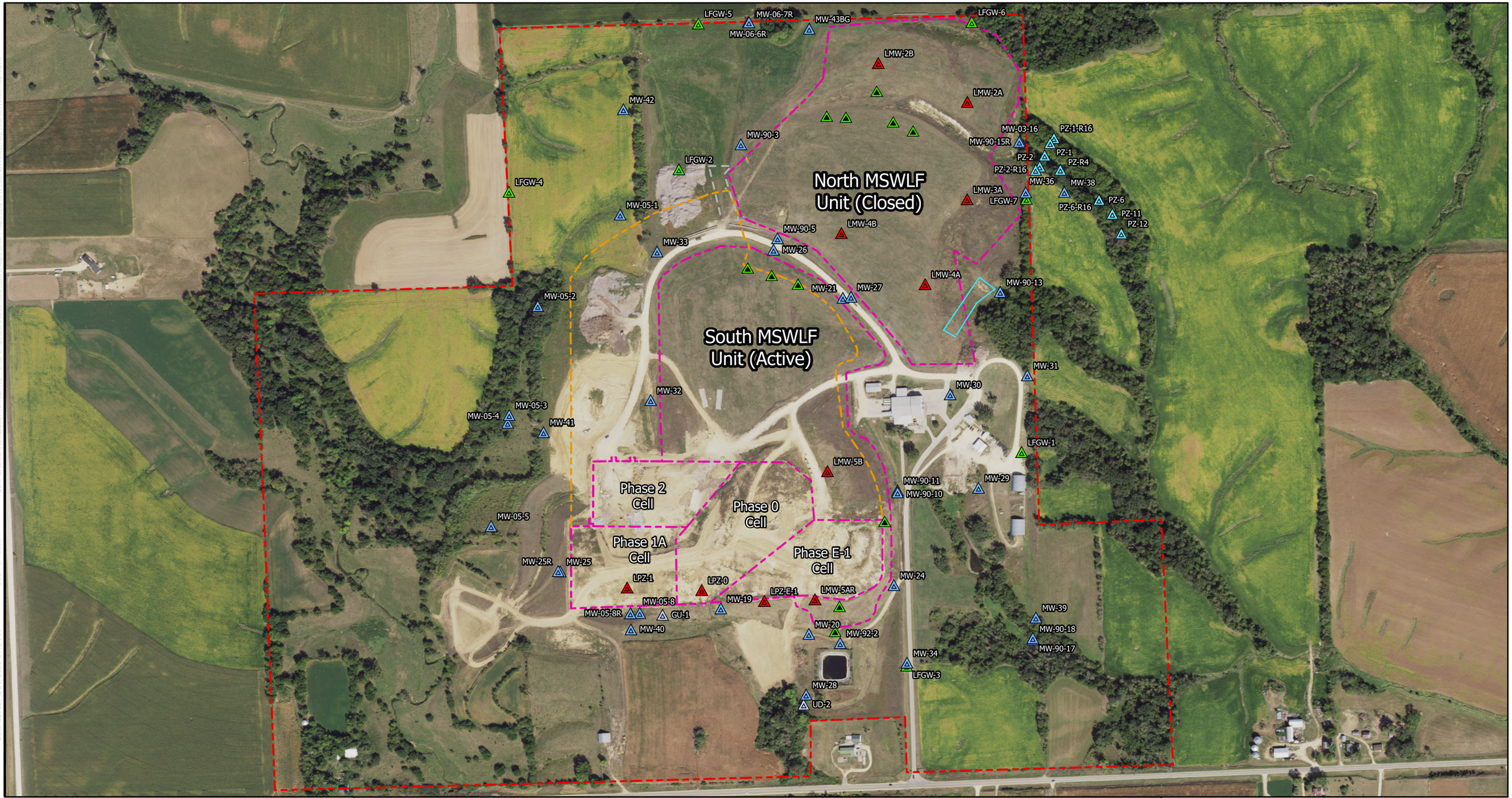
The Clinton County Sanitary Landfill has an agreement with the City of Clinton Water Pollution Control Facility. Collected leachate from the leachate storage lagoon is discharged to the City of Clinton's sanitary sewer system. Pre-treatment of the leachate is not required prior to discharge to the City of

Clinton's sanitary sewer system and no leachate or wastewater treatment systems are present on-site.

Financial Assurance

n. Financial assurance. Financial assurance shall be maintained pursuant to rule 113.14(455B).

The Clinton County Area Solid Waste Agency will continue to maintain financial assurance pursuant to rule 113.14(455B). Closure and postclosure cost estimates have been updated on an annual basis. The current mechanism is a Local Government Dedicated Fund. The 2024 calendar year financial assurance approval letter is included in this submittal as **Attachment D**.



Site Map

Legend

- Monitoring Well
- Groundwater Underdrain
- Groundwater Piezometer
- Leachate Monitoring Location
- Landfill Gas Monitoring Point
- Gas Vent
- Petroleum Contaminated Soils Area
- Interceptor Trench
- Approximate Current Waste Boundary
- Approximate Future Waste Boundary
- Approximate Property Boundary

Clinton County Sanitary Landfill
East MSWLF Unit
Clinton, Iowa
Project No: 27223133.25
Drawing Date: April 2025

N
W
E
S

0 375 750 1,500 Feet

Figure 1-1

SCS ENGINEERS
environmental consultants and contractors

ATTACHMENT A

LOAD CHECKING FORM

MONTHLY LOAD CHECKING - SURVEILLANCE FORM
Clinton County Sanitary Landfill
Permit No. 23-SDP-01-74P

Date and Time: _____

Load Checker (Print): _____

Load Checker (Sign): _____

Agency/Company: _____

Vehicle/Box#: _____

Waste Source (Check):
- ☐ Household
- ☐ Commercial
- ☐ Government
- ☐ Other _____

Review of Load (Check):
- ☐ No prohibited waste found
- ☐ Prohibited waste found
  List: _____
- ☐ Unable to separate prohibited waste
- ☐ Discovered after dumping
- ☐ Other _____

Action Taken (Check):
- ☐ Entire load refused
- ☐ Partial load refused
- ☐ Prohibited waste held for follow-up
- ☐ Unable to segregate prohibited waste
- ☐ Other _____

Notes (Check):
- ☐ Generator unknown
- ☐ Generator referred to hauler
- ☐ Prohibited waste reported to IDNR
- ☐ Unable to segregate prohibited waste
- ☐ Other _____

General Notes: _____

_____

_____

Driver (Print): _____

Driver (Sign): _____

ATTACHMENT B

PLAT OF SURVEY

To be submitted prior to closure

ATTACHMENT C

SCALE CERTIFICATE

POST IN CONSPICUOUS PLACE

NONTRANSFERABLE

STATE OF IOWA

DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

DES MOINES

SCALE LICENSE

License No. 9208
CLINTON CO AREA SOLID WASTE
PO BOX 996
CLINTON IA 52732

SCALE LOCATION
CLINTON SOLID WASTE COMM
4292 220TH STREET
CLINTON IA 52732

IS GRANTED THE ABOVE LICENSE PURSUANT TO SECTIONS 214, CODE OF IOWA. THIS LICENSE SHALL REMAIN IN FULL FORCE FROM THE DATE OF ISSUE UNTIL ITS EXPIRATION DATE, UNLESS REVOKED OR SUSPENDED FOR CAUSE BY THE SECRETARY OF AGRICULTURE FOR NONCOMPLIANCE WITH CHAPTER 214, CODE OF IOWA OR RULES ADOPTED PURSUANT THERETO.

DATE OF ISSUE 10/30/2024

EXPIRATION DATE
12/31/2025

This license is non-transferable and non-refundable

Mike Naig

SECRETARY OF AGRICULTURE

TYPE OF DEVICE --- NUMBER	
0 THRU 500 LBS	0
501 THRU 5000 LBS	0
5001 THRU 50000 LBS	0
50001 THRU 120000 LBS	0
OVER 120000 LBS	1
MOISTURE METERS	0
COUNTY	23

ATTACHMENT D

2024 FINANCIAL ASSURANCE APPROVAL

IOWA DEPARTMENT OF NATURAL RESOURCES

GOVERNOR KIM REYNOLDS
LT. GOVERNOR ADAM GREGG

DIRECTOR KAYLA LYON

May 5, 2025

BRAD SEWARD
DIRECTOR OF OPERATIONS
CLINTON COUNTY AREA SOLID WASTE AGENCY
4292 220TH STREET
PO BOX 996
CLINTON IA 53732

Re: Clinton County Area Solid Waste Agency
Permit No. 23-SDP-01-74P
2025 Financial Assurance Approval

Dear Mr. Seward:

This is notification by the Iowa Department of Natural Resources (DNR) that the Clinton County Area Solid Waste (Agency) has adequately complied with the financial assurance requirements of 567 IAC 113.14(455B) for the Agency's landfill. The Agency's financial assurance documentation (Doc #112709), dated April 1, 2025, has been placed in the DNR's record files.

The projected deposit of **$235,063** to the Agency's closure and post-closure Local Government Dedicated Fund (LGDF) needs to be made by July 30, 2025. The deposit amounts are as stated in the "Formula for Projected Deposits" component of Section 7 of the Agency's Financial Assurance Report Forms.

Please note that the Agency may withdraw money from the closure and post-closure LGDF without DNR approval for the purpose of funding closure, including partial closure, or post-closure activities in accordance with 567 IAC 113.14(8)"d." As a reminder, compliance with 567 IAC 113.14(455B) is to be submitted annually, by April 1st, confirming that all applicable financial assurance documents are updated as required.

Please feel free to contact me with any questions. I can be reached at (515) 802-8835 or mary.klemesrud@dnr.iowa.gov.

Sincerely,

Mary Klemesrud
Digitally signed by Mary Klemesrud
Date: 2025.05.05 15:58:06 -05'00'

Mary Klemesrud
Program Planner
Land Quality Bureau

Cc: Christine Collier, P.E., SCS Engineers
Chris Calhoun, SCS Engineers
Iowa DNR Field Office #6, Washington

Appendix C

Emergency Response and Remedial Action Plan

Emergency Response and Remedial Action Plan (ERRAP)

Clinton County Sanitary Landfill (East)
4292 220th St.
Clinton, IA 52732

SCS ENGINEERS

Project No. 27225264.00 | July 2025

1690 All State Court, Suite 100
West Des Moines, IA 50265
(515) 631-6160

Table of Contents

Attachments

1.0 EMERGENCY RESPONSE AND REMEDIAL ACTION PLANS [567 IAC – 113.8(5)(455B)]

113.8(5)b(1) Facility Information

The Clinton County Area Solid Waste Agency (Agency) owns and operates the Clinton County Sanitary Landfill (East Site).

The Clinton County Area Sanitary Landfill (Landfill) receives municipal solid waste (MSW) from the Agency's service area.

113.8(5)"b"(1)1 Permitted Agency

Clinton County Area Solid Waste Agency

113.8(5)"b"(1)2 DNR Permit Number

23-SDP-01-74P

113.8(5)"b"(1)3 Responsible Official and Contact Information

Clinton County Area Solid Waste Agency
4292 220th Street
P.O. Box 996
Clinton, Iowa
Contact: Brad Seward
Phone: (563) 243-4749

113.8(5)"b"(1)4 Certified Operator and Contact Information

Director – Brad Seward
Clinton County Sanitary Landfill
4292 220th Street
Clinton, Iowa
Phone: (563) 243-4749

113.8(5)"b"(1)5 Facility Description

Municipal solid waste landfill.

113.8(5)"b"(1)6 Site and Environs Map

See Attachment 1 for Site Plan Map.

113.8(5)b(2) Regulatory Requirements

113.8(5)"b"(2)1 Iowa Code Section 455B.306(6)"d" Criteria Citation

This Emergency Response and Remedial Action Plan (ERRAP) is designed to meet the requirements of Iowa Administrative Code (IAC) 567 Chapter 113.8(5) that requires the submission of an ERRAP by all sanitary disposal projects.

This ERRAP is intended to:

- Identify possible occurrences that may endanger human health and the environment;
- Establish provisions to minimize the possibility of fire or explosion; and
- Establish provisions to minimize any releases to air, land, or water of pollutants that could threaten human health and the environment.

113.8(5)"b"(2)2 Reference to Provisions of the Permit

An updated ERRAP will be submitted at the time of each permit renewal application if a review indicates that revisions are required. The ERRAP is intended to be flexible and to meet contingencies arising at the facility. Requests for changes to the ERRAP may be submitted to the Director.

113.8(5)b(3) Emergency Conditions, Response Activities and Remedial Action

113.8(5)"b"(3)1 Failure of Utilities

Utilities include propane, electricity, and water.

Propane Gas

Propane Gas Supply Failure – Short-Term and Long-Term

In the event Landfill facilities are without propane gas supply and propane gas odor is not present, contact the following:

- Director – See Attachment 2 for telephone and mobile numbers.
- Propane Gas Company – See Attachment 2 for telephone numbers.

Propane Gas Leak

If a gas odor is present and it is strong, take immediate action:

- Propane gas is an asphyxiate. In proper concentrations, it can suffocate a person – use caution if a gas odor is present.
- Try to shut off the propane gas by turning the shut-off valve to the horizontal position.
- Leave the building where odor is identified. Go to the Emergency Assembly Point. Account for Landfill personnel, guests, contractors, etc.
- Do not attempt to locate gas leaks.
- Open doors and windows.
- Do not turn on or off or unplug electrical appliances.
- Do not use telephones in or around the building or office.
- Do not position or operate vehicles or powered equipment.
- Do not attempt any other repairs to the propane gas systems.
- If you turn off the gas for any reason, it must be turned back on by a professional.

Electricity

Electricity Failure – Short-Term and Long-Term

In case of electrical failure, the following individuals must be contacted:

- Director – See Attachment 2 for telephone and mobile numbers.
- Electricity Supply Company – See Attachment 2 for telephone number.

Scale Failure Due to Electricity Supply Failure

Scale weights may be estimated based on vehicle size (volume of waste) and converted to tons, or historical scale weights may be used for representative loads from particular vehicles or companies. Note each load for which the weight was estimated.

Buildings

Although the facility is primarily open during daylight hours, twilight and dusk operations may require supplemental light and heat if the electricity fails. Non-electrical space heaters may be used for supplemental heat; however, manufacturer's recommendations for ventilation must be observed.

- Keep portable and space heaters at least 3 feet from combustible materials.
- Electric flashlights and electric lanterns should be used for supplemental light.
- Use extreme caution if candles must be used, candles should only be used temporarily, on a limited basis until a safer form of light can be located such as flashlights, electric lanterns, etc. Candles within glass containers are preferred over those with open/exposed flame.
- Never leave a burning candle unattended. Extinguish all candles when leaving a room.
- Never use a candle for light when fueling equipment.

Water

Water Failure – Short-Term and Long-Term

In case of water failure, the following individuals must be contacted:

- Director – See Attachment 2 for telephone and mobile numbers.
- Water Supply Company – See Attachment 2 for telephone number.

113.8(5)"b"(3)2 Evacuation Procedures During Emergency Conditions

- See the Site Plan Map (Attachment 1) for evacuation meeting locations and evacuation routes.

113.8(5)"b"(3)3 Weather-Related Events

Use battery operated radios/televisions to receive the most updated information on local conditions.

Tornado and Wind Events

Tornado Terminology

- Tornado Watch – The weather conditions are possible for a tornado.
- Tornado Warning – A tornado has been sighted or indicated by weather radar.

Tornado Watch Procedures

- Listen to the radio or television for more information.
- Locate emergency supplies such as battery-powered radio, mobile telephone, and spare batteries.
- Be prepared to take shelter in the designated tornado shelter (see Attachment 1).
- If you see any revolving funnel-shaped clouds, report them immediately by telephone to your local law enforcement agency.
- If you are in a trailer or similar structure, move to a more secure structure.

Tornado Warning Procedures

- Take shelter with a battery-operated radio. Take shelter in area(s) designated as a tornado shelter or an interior room or hallway.
- The facility's Tornado Shelter Location is shown on the Site Plan Map (See Attachment 1).
- If you cannot reach the Tornado Shelter, go to a crawlspace under the scales or to an inside hallway on the lowest level. Avoid places with wide-span roofs. Stay away from windows and open spaces. Get under a piece of sturdy furniture such as a workbench, heavy table, or desk and hold on to it.
- Turn on a battery-operated radio or television and wait for the "all clear" announcement by the authorities.

Tornado Safety – Outdoors

- During tornado warning, Landfill staff and supervisors proceeding to a shelter by vehicle should keep an eye out for any other employees or customers along the way and pick them up for transport.
- If possible, get inside a substantial building.
- If shelter is not available or there is no time to get indoors, lie in a ditch, culvert, or low-lying area or crouch near a strong building. Use your arms to protect your head and neck. Be alert for potential flash flooding.

Tornado Safety – In a Vehicle

- Never try to outrun a tornado in a vehicle. Heavy rain, hail, and traffic may impede your movement. Tornadoes can change directions quickly and can easily lift up a vehicle and toss it through the air.
- Pull to the side of the road avoiding trees, power lines, and other objects that could fall or be hazardous.
- Get out of the vehicle immediately and try to take shelter in a nearby building.
- If there is not time to get indoors, get out of the vehicle and lie in a ditch, culvert, or low-lying area away from the vehicle. Use your arms to protect your head and neck.

After a Tornado

- Try to get out of damaged buildings. Once out, do not re-enter the damaged building unless necessary and use great caution.
- Extinguish all smoking and small fires.
- Monitor the radio or television for emergency information or instructions.
- Account for Landfill personnel, known guests/customers/contractors, and check on neighbors who may require special assistance.
- Check for injured victims. Render first aid if necessary. Call the necessary emergency responders such as ambulance services or fire/rescue services.
- Do not attempt to move severely injured victims unless necessary. Wait for emergency medical assistance to arrive.
- Watch out for broken glass and downed power lines.
- Report any downed power lines.
- Use the telephone only for emergency calls. Telephone lines may be down. Mobile telephone services may be used for emergency calls.
- Take photos or videotape of the damage to the property.
- If driving, be alert for hazards in the roadway.
- If unaffected by the tornado, stay out of the damaged area until allowed in by officials. Your presence may hamper emergency operations.

After a Tornado – Gas Leaks

- Check for gas leaks. If you smell gas or hear a blowing or hissing noise, open a window and quickly leave the area.
- Call the Propane Gas Company from a mobile telephone or a telephone away from the affected property.

After a Tornado – Electrical System Damage

- Look for electrical system damage.
- If you see sparks, broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker.
- If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.
- See Attachment 2 for emergency contacts.

After a Tornado – Sewage and Water Line Damage

- Check for sewage and water line damage.
- If you suspect sewage lines are damaged, avoid using the toilets and call a plumber.
- If water pipes are damaged, contact Water Company and avoid using water from tap.

After a Tornado – Methane Collection and Venting Systems

- Check methane collection/venting systems.
- If the collection/venting system lines are malfunctioning, contact a professional engineer for repair assistance.

- Monitor methane gas soon after the incident to check for hazardous methane levels. Remember that methane (by itself) is an odorless gas.

After a Tornado – Leachate Transportation and Leachate Storage Systems

- Check leachate transportation and storage systems including tanks, lagoons, and lines.
- If leachate is leaking into the environment, attempt to shut the leachate line valve, stopping the flow.
- If leachate is leaking into the environment from a lagoon, take immediate steps to limit flow into drainage ways by constructing an earthen berm.
- Report leachate spills to the Iowa Department of Natural Resources (See Attachment 2 for emergency contacts).

After a Tornado – Bulk Fuel/Solvent Storage Systems

- Extinguish all smoking and small flames.
- If a spill/leak exists, attempt to stop the leak/spill or absorb fuel with inert materials.
- If bulk fuel is leaking into the environment from a storage system, take immediate steps to limit flow into drainage ways by constructing an earthen berm.
- Report spills or leaks to the Iowa Department of Natural Resources (See Attachment 2 for emergency contacts).

Wind Storm Terminology

- Derecho – A line of intense, widespread, and fast-moving windstorms and sometimes thunderstorms that moves across a great distance and is characterized by damaging winds.
- Down Burst – A strong out rush of wind formed by rain cooled air. Strong down bursts, which produce extensive damage, are often mistaken for tornadoes. A downburst can easily overturn a mobile home, tear roofs off houses, and topple trees.

Winter Storm Terminology

- Winter Storm Watch – Indicates that severe winter weather may affect your area.
- Winter Storm Warning – Indicates that severe winter weather conditions are definitely on the way.
- Blizzard Warning – Indicates that large amounts of falling or blowing snow and sustained winds of at least 35 miles per hour are expected for several hours.

Winter Storm Procedures

- Listen to the radio or television for more information.
- Locate emergency supplies such as battery-powered radio, mobile telephone, and spare batteries.
- Be prepared to take shelter in the designated tornado shelter (see Attachment 1).
- If you are in a trailer or similar structure, move to a more secure structure.
- Proceed with caution as snow can hinder vision and ice can cause vehicles and people to slide.

Intense Rainstorms, Mud, and Erosion

Thunderstorm Terminology

- Severe Thunderstorm Watch – A severe thunderstorm (damaging winds 58 miles per hour or more, or hail three-fourths of an inch in diameter or greater) is likely to develop.
- Severe Thunderstorm Warning – A severe thunderstorm has been sighted or indicated by weather radar.

Thunderstorm Watch Procedures

- Locate a safe place, such as the designated tornado shelter.
- Assign someone to listen to a battery-powered radio or television for more information.

Thunderstorm Warning Procedures

- Go to a safe place, such as the designated tornado shelter.
- Turn on a battery-operated radio or television and wait for the "all clear" by the authorities.
- Tornadoes are spawned by thunderstorms and flash flooding can occur with thunderstorms. When a "severe thunderstorm warning" is issued, review what actions to take under a "tornado warning" or a "flash flood warning."

Procedures After a Thunderstorm

- Check personnel, guests, clients, and contractors for injuries.
- Report downed utility wires.
- Check scale for proper operation. If the electricity is out, see Section113.8(5)"b"(3)1.
- Continue to listen to the radio for flash flood and/or tornado watches and warnings and other instructions and advice.

Check Leachate Transportation and Leachate Storage Systems

- Check leachate transportation and storage systems including tank and lines.
- If leachate is leaking into the environment, attempt to shut the leachate line valve, stopping the flow of leachate.
- Report leachate spills to the Iowa Department of Natural Resources (DNR). See Attachment 2 for Emergency Contacts.

Check Bulk Fuel Storage Systems

- Extinguish all smoking and small flames.
- If a spill/leak exists, attend to stop the spill/leak or absorb fuel with inert materials.
- See Attachment 2 for DNR Emergency Contacts.
- See Attachment 3 for DNR guidelines for reporting hazardous conditions and a copy of Iowa Administrative Code Chapter 131 (Section 457).

Lightning Strikes

There are relatively safe places from lightning strikes, however no location is free of risk. Large, enclosed structures are generally safer than small or open structures. The risk for lightning injury depends on whether the structure incorporates appropriate lightning protection.

Enclosed vehicles, fully enclosed farm vehicles, etc. with the windows rolled up generally provide good shelter from lightning. Avoid contact with metal or conducting surfaces outside or inside the vehicle.

Avoid being in or near:

- High places and open fields, isolated trees, unprotected sheds, communication towers, flagpoles, light poles, metal fences, and water.
- When inside, avoid the use of the telephone, contact with water or conductive surfaces with exposure to the outside such as metal door or window frames, electrical wiring, telephone wiring, cable TV wiring, and plumbing, etc.

Lightning Strike Victim

- A person who has been struck by lightning does not carry an electrical charge that can shock other people.
- A nearby strike may also cause medical problems, check personnel and call emergency medical assistance (911) if necessary.
- Provide first aid and call emergency medical assistance (911) immediately. Look for burns where lightning entered and exited the body.

Flooding

Flood Terminology

- Flash Flood Watch – A flood is possible, be alert to signs of flash flooding, and be ready to evacuate. Know the local terrain; flash floods can happen more quickly in hilly terrain or low-lying areas.
- Flash Flood warning – A flood is already occurring and will occur soon in your area. Listen to local radio and television for local information and advice.

Flood Damage Prevention Procedures

- Move key documents, electronic files, computers, etc. to higher ground or take them with you if you must evacuate.
- Review evacuation procedures with employees.
- If necessary, attempt to build earthen dams to protect buildings and property.
- Turn on battery-operated radio or television to get the latest emergency information.
- If told to leave, do so immediately.

Procedures During a Flood

- Evacuation may be necessary. If advised to evacuate, do so immediately.
- Never drive into a flooded area.

- Never drive around road barricades.
- In case employees are separated from one another during floods or flash floods, each employee shall contact the Director so all employees can be accounted for.
- Evacuation is much simpler and safer before floodwaters become too deep for ordinary vehicles to drive through.
- Listen to a battery-operated radio or television for evacuation instructions.
- Follow recommended evacuation routes – shortcuts may be blocked.
- Leave early enough to avoid being marooned by flooded roads.

Procedures During a Flood – If Outdoors

- Climb to high ground and stay there.
- Avoid walking through any floodwaters. If it is moving swiftly, even water 6 inches deep can sweep you off your feet.

Procedures During a Flood – If in a Car

- Never drive into a flooded area.
- Never drive around road barricades.
- If you come to a flooded area, turn around and go another way.
- If your car stalls, abandon it immediately and climb to higher ground. Many deaths have resulted from attempts to move stalled vehicles.

Procedures After a Flood

- Return to the area only after it has been declared safe by local emergency management officials. Follow all emergency rules, laws, and regulations.
- Report and stay clear from loose power lines or damaged utilities.
- Report downed power lines to your utility company or local emergency manager.
- Some appliances, such as television sets, can shock you even after they have been unplugged. Do not use appliances or motors that have gotten wet unless they have been taken apart, cleaned, and dried.
- Be alert for gas leaks. Use a flashlight to inspect for damages. Do not smoke or use candles, lanterns, or open flames unless you are sure that the gas has been turned off and the area has been aired out.
- Look for fire hazards - broken or leaking gas lines, flooded electrical circuits, submerged furnaces, or electrical appliances, or flammable or explosive materials coming from upstream.
- Service damaged septic tanks, cesspools, pits, and leachate systems as soon as possible. Damaged sewage systems are health hazards.
- Document the damage for insurance purposes by taking notes and photographs.

Structural Stabilization: Temporary Measures

- Identify potential deficiencies and provide temporary shoring to protect life and property while the water levels are receding. All shoring measures should be planned with the assistance of qualified structural engineers or contractors.
- Support unstable or leaning structures or features with temporary bracing and reinforcement.

- Strengthen exposed foundations or brace areas of undermining by following engineer's recommendations.
- Brace and strengthen decayed or damaged floor and ceiling structure. Check bearing locations for movement or settlement.

Check Methane Collection and Venting Systems

- Check methane collection/venting systems..
- Monitor methane gas soon after the incident to check for hazardous methane levels.

Check Leachate Transportation and Storage Systems

- Check leachate transportation and storage systems including tanks, lagoons, and lines.
- If leachate is leaking into the environment, attempt to shut the leachate line valve, stopping the flow.
- If leachate is leaking into the environment from a lagoon, take immediate steps to limit flow into drainage ways by constructing an earthen berm.
- Report leachate spills to the Iowa Department of Natural Resources (See Attachment 2 for emergency contacts).

Check Bulk Fuel Systems

- Extinguish all smoking and small flames.
- If a spill/leak exists, attend to stop the spill/leak or absorb fuel with inert materials.
- See Attachment 2 for DNR Emergency Contacts.
- See Attachment 3 for DNR guidelines for reporting hazardous conditions and a copy of Iowa Administrative Code Chapter 131 (Section 457).

Check for Large Scale Erosion

- Immediately cover any eroded areas exposing waste.
- Identify and repair access roads, approach ramps, and internal roads that were affected by erosion.
- Identify and repair let-down structures, berms, and terraces affected by erosion.

Acceptance of Flood Related Wastes

- Do not accept hazardous material for landfilling, even if it is flood related debris.
- Do not accept free flowing liquids, even if the container is thought to contain only flood-related liquid.
- Do not accept containers that contain unknown materials, especially drums and similar containers that "floated" to the current owner.
- Document all flood-related debris for possible credit/reimbursement from city, county or state government.
- Prepare a request to DNR to exempt exceptional event debris from goal progress and tonnage fee with the next Quarterly Solid Waste Fee Schedule & Retained Fees Report.

Event and Post Event Conditions

See Sections under Section 113.8(5)“b”(3)3 Weather Related Events.

113.8(5)“b”(3)4 Fire and Explosions

In case of any size fire, the following individual must be contacted:

- Director – See Attachment 2 for telephone number.

If a fire cannot be controlled by site personnel, report to the fire department by dialing 911 using cellular phones or the phone in the site office.

Basic Fire Safety

- Stockpile soil near the working face to assist with hot loads.
- Site will comply with local and state fire codes, including the placement and maintenance of fire extinguishers, smoke detectors, etc.
- See the Site Map (Attachment 1), identify Evacuation Routes, Fire Escape Routes, and Emergency Assembly Locations.
- Keep exit routes clear and well-marked.
- Cigarette, cigar, and/or pipe smoking are not allowed indoors in public places in Iowa. Make sure smoking materials are completely extinguished before entering the building. Never leave hot ashes or burning tobacco products unattended.
- Avoid using extension cords wherever possible, especially small-wired cords used with high-wattage appliances.
- Extension cords should not be run under rugs or hooked over nails.
- If a fuse blows (or a breaker "trips"), find the cause. Remove excess appliances (lamps, stereo components, space heaters, etc.) from a breaker circuit that frequently "trips."
- Discard food that has been exposed to heat, smoke, or soot.
- Do not discard damaged goods until after an inventory has been taken.
- Give first aid where appropriate.
- Stay out of damaged buildings.
- Return to the facility only when local fire authorities say it is safe.

Waste Materials

For materials that may become ignited:

- Call the Director. See Attachment 2 for telephone number.
- If materials are in the working face and can be safely removed, remove and place near but not on, the working face, and extinguish. Use extreme caution if any attempt is made to control the fire.
- For small fires located outside of the working face, a fire extinguisher may be used.
- If a fire cannot be controlled by site personnel, report to the local Fire Department. See Attachment 2 for telephone number.

Buildings and Site

Small Localized Fire – Building or Office

- Caution: A small-localized fire can engulf a room in less than 60 seconds.
- Act quickly. Smoke can be dangerous.
- Use a fire extinguisher to extinguish the flame; aim at the base of the flame.
- Remove nearby flammable materials such as paper, drapes, rags, etc.
- Evacuate all unnecessary personnel – go to the Emergency Assembly Location. In the event the Emergency Assembly Location is dangerous or inaccessible, proceed to the Secondary Emergency Assembly Location (See Attachment 1).
- If a fire cannot be controlled by site personnel, report to the local Fire Department. See Attachment 2 for telephone number.

Out of Control Fire – Building or Office

- Get out of the building. Familiarize yourself with at least two exits from each room; for example, one window and one door.
- Go to the Emergency Assembly Location. In the event the Emergency Assembly Location is dangerous or inaccessible, proceed to the Secondary Emergency Assembly Location (See Attachment 1).
- Contact the local Fire Department from a mobile phone. See Attachment 2 for telephone number.
- Never go back inside a building for any reason.

Equipment

Engine Fires

- Immediately turn off the ignition to shut down the fuel pump and the flow of fuel.
- Putting out an engine fire safely and efficiently takes two people. One holds the fire extinguisher and the other opens the hood. The fire will flare up as the fresh air hits it. Immediately spray the fire extinguisher across the base of the flames until the fire is out.
- It is important to get the hood open fast. If the fire burns through the hood release cable before you can get it open, there will be no way to get at the fire.
- Do not try to put out an engine fire by spraying the extinguisher through the radiator or through the wheel wells, this method will not work and will waste time and the fire extinguisher contents. Get at the base of the flames.
- If a fire cannot be controlled by site personnel, report to the local Fire Department. See Attachment 2 for telephone number.
- The equipment will be thoroughly inspected and repaired, if necessary, prior to reuse.

Fuels

General Safety

- Vapors from fuels can be more flammable than liquid, always use caution when filling vehicles or containers.
- Equipment shall be refueled only at designated locations.

- In case of spillage, filler caps shall be replaced, and spillage disposed of before engines are started.
- Engines shall be stopped and operators shall not be on the equipment during refueling operations.
- Only designated persons shall conduct fueling operations.
- Smoking and open flames shall be prohibited in areas used for fueling, fuel storage, or enclosed storage of equipment containing fuel.
- Liquid fuels not handled by pump shall be handled and transported only in portable containers or equivalent means designed for that purpose. Portable containers shall be plastic, have tight closures with screw or spring covers and shall be equipped with spouts or other means to allow pouring without spilling. Leaking containers shall not be used.

Fire Event

- If possible, turn off the pump or the nozzle distributing flammable liquid.
- Evacuate the area. Stay well clear of the above ground storage tank in case of explosion. Go to the Emergency Assembly Location (See Attachment 1).
- Call the Fire Department. See Attachment 2 for telephone number.
- Call the Director. See Attachment 2 for telephone number.

Utilities

Propane Gas

- Call the Fire Department. See Attachment 2 for telephone number.
- If the Emergency Assembly Point is a safe distance away, go to that site or go to the Secondary Emergency Assembly Point.
- Caution: Exploding tanks may eject pieces of the tank several hundred feet. These pieces can be lethal.
- The Fire Department may allow the tank to burn itself out.
- Call the Director (See Attachment 2 for telephone and mobile phone numbers).

Electrical – Small Localized Fires

- Use a fire extinguisher rated Class C: Energized Electrical Equipment including Wiring, Fuse Boxes, Circuit Breakers, Machinery, and Appliances.
- Caution: A small-localized fire can engulf a room in less than 60 seconds.
- Act quickly.
- Remove nearby flammable materials such as paper, drapes, rags, etc.
- Evacuate all unnecessary personnel – go to the Emergency Assembly Location. In the event the Emergency Assembly Location is dangerous or inaccessible, proceed to the Secondary Emergency Assembly Location (See Attachment 1).

Electrical – Larger Uncontrolled Fires

- Get out of the building. Familiarize yourself with at least two exits from each room; for example, one window and one door.
- Go to the Emergency Assembly Location (See Attachment 1).
- Contact the Fire Department from a mobile phone. See Attachment 2 for telephone number.

- Never go back inside a building for any reason.

Facilities

See Section 113.8(5)“b”(3)4 Buildings and Site. There are no additional facilities that have not been previously covered.

Working Area

Landfill fires can be started from several causes: spontaneous combustion, careless smoking, methane flash, and arson.

- Understand and be aware of warning signs.
- Always report any visible smoke to the Director.
- If in doubt about a possible fire or signs of fire call the Fire Department. See Attachment 2 for telephone number.

Once a Fire is Identified

- Control access and site security.
- All persons must be required to sign in and out.
- Establish radio communications with firefighting, public safety, and Landfill personnel.
- First aid should be available on-site.
- Warning fences should be placed around any trenches dug as fire breaks.
- Safety meetings should be held daily.
- Spotters should be used to assist equipment operators.

Controlling a landfill fire may be accomplished through local firefighting equipment, or landfill firefighting experts may need to be contacted. Follow the instructions of the firefighting professionals on site.

- Excavated waste may require a hot pad where it can be spread and soaked with water or other fire extinguishing media.
- Soaked materials may require a cool pad storage area.
- Earthmoving equipment may be required to dig firebreaks down to bare earth or to build earthen dams.

Landfill stockpile fires can be started from several causes: spontaneous combustion, careless smoking, methane flash, lightning, and arson.

- Understand and be aware of warning signs.
- Always report any visible smoke to the Director. Some steam from composting piles and some other stockpiles may be normal due to the natural decomposition process. Report unusual levels of steam to the Director.
- If in doubt about a possible fire, call the Fire Department (See Attachment 2 for emergency telephone numbers).
- Use caution while excavating “hot” materials, exposure to the air may create flames.
- Before attempting to excavate the “hot spot” within a stockpile, a spotter should watch equipment operators.

- Move “hot” materials to a hot pad so the materials can be sprayed with water or fire extinguishing media.

Unaffected stockpile materials and soaked stockpile materials should be moved to a cool pad while the remaining materials are excavated.

Hot Loads

Smoldering or ignited fires in a vehicle.

- “Hot loads” are loads of waste or vehicles that are smoking, smoldering, or are on fire. Hot loads may arrive at the facility without the driver aware of the risk.
- Do not dump hot loads on top of exposed waste of any kind.
- Do not stop a truck on fire or containing a hot load near a building.
- Quickly alert the driver and direct the truck toward a safe area.
- Call the Fire Department. See Attachment 2 for telephone numbers.
- If the load can be dumped without harming the driver or others, dump the load in a safe area. Caution: A fire may spread quickly or “flash” as air is introduced.
- Use soil to place over smoldering or burning loads.
- Stay out of the "zone of danger," which is the cone-shaped area directly behind a vehicle with the gas tank located in the usual position at the back. If a gas tank explodes, it sends a tremendous blast out from the rear of the vehicle. This can be lethal for 50 to 100 feet behind the vehicle.

Waste Gases

- If you witness a flash fire potentially caused by methane, leave the area immediately. If the Emergency Assembly Location is a safe distance away, go to that site or go to the Secondary Emergency Assembly Location.
- See the Site Map (Attachment 1) with Evacuation Routes, Fire Escape Routes, and Emergency Assembly Locations.
- Call the Fire Department. See Attachment 2 for telephone numbers.
- Contact the Director. See Attachment 2 for telephone numbers.

Explosive Devices

- Use the alarm system and leave the area immediately. If the Emergency Assembly Point is a safe distance away, go to that site or go to the Secondary Emergency Assembly Point.
- See the Site Map (Attachment 1) with Evacuation Routes, Fire Escape Routes, and Emergency Assembly Locations.
- Call the Fire Department. See Attachment 2 for telephone numbers.
- Contact the Director. See Attachment 2 for telephone numbers.

113.8(5)“b”(3)5 Regulated Waste Spills and Releases

Waste Spills and Releases Terminology

- Regulated Waste – Generally includes non-hazardous material such as leachate, municipal solid waste, and petroleum contaminated soils.

- Spill – A spill primarily involves liquids or solids that are deposited accidentally on the facility's property in an incorrect location but remain within the facility's property boundary. Spills include quantities of 100 gallons or less, or two tons or less.
- Release – A release may involve spills of solids or liquids greater than 100 gallons or greater than two tons that enter lagoons, sedimentation ponds, drainage ways, etc., but stay on-site.
- Off-site Release – An off-site release is a release or spill that leaves the facility's property boundary. This section includes groundwater releases.

Waste Materials

Waste Materials Terminology

- Waste Materials – Waste materials are materials normally accepted at a landfill. Waste materials are also regulated wastes.
- On-Site Spill or Release – Use caution and remove the waste, placing it in an acceptable location, such as the working face, for proper disposal.
- Off-Site Spill or Release – If waste materials are identified beyond the property and/or waste materials are observed to be in a waterway, see Section 113.9(5)"b"(3)5.

Leachate

Lagoons

Leachate should not overflow the rim of the lined leachate collection lagoon or leak from a puncture or tear. If leachate should be observed overflowing or leaking from the leachate lagoon, actions should be taken to pump leachate into a tanker truck or other vehicle for transport to a Publicly Owned Treatment Works (POTW).

Generally, the leachate must be sampled and tested before the POTW will accept the material. Sampling and testing may take 24 to 72 hours or more.

- Contact the Director (See Attachment 2 for telephone and mobile phone numbers).
- Call the State of Iowa (See Attachment 2 for telephone numbers).

Drainage Systems

- Leachate should not overflow into a non-leachate designated drainage system from a seep or other event such as overflow from a leachate lagoon.
- If leachate is observed overflowing into a drainage system actions should be taken to stop the flow of leachate.
- Earthen dams could be constructed to divert the leachate.
- Contact the Director (See Attachment 2 for telephone and mobile phone numbers).

Tanker Spills/Seeps/Miscellaneous Spills

Leachate from seeps and spills should not be allowed to flow beyond the Landfill property boundary and should not be allowed to enter a creek, river, or stream.

Leachate flows from seeps can often be temporarily diverted if the seep is excavated and recompacted.

Small leachate spills from tankers or other sources should be observed so they do not leave the property boundary. Absorbent materials, such as yard waste or compost, could be placed on the spill to minimize tracking.

Waste Gases

Methane gas is a by-product of waste decomposition and can be explosive in specific concentrations. Methane gas is colorless and odorless; odor emanates from other gases mixed with the methane.

- Methane gas can migrate and accumulate in enclosed buildings, under scales, crawl spaces, and other confined spaces.
- Methane gas concentration levels are often detected using an electronic meter.

If methane gas is detected within explosive limits:

- Extinguish all smoking.
- Attempt to ventilate the area by opening windows/doors.
- If the methane is detected in a scale house or other building regularly occupied, evacuate immediately and go to the Emergency Assembly Point (See Attachment 1).
- Contact the Director (See Attachment 2 for telephone and mobile phone numbers).
- Contact the Fire Department (See Attachment 2 for telephone and mobile phone numbers).
- Contact the DNR Field Office (See Attachment 2 for telephone and mobile phone numbers).
- Do not return to the building until it has been properly ventilated and the concentrations have been checked with an electronic meter.

Waste Stockpiles and Storage Facilities

The facility does not have waste stockpiles or storage facilities.

Waste Transport Systems

This site does not have waste transport systems.

Litter and Airborne Particulate

Litter and airborne particulates will be controlled according to the sanitary disposal project permit.

Site Drainage System

If drainage systems are observed to be functioning improperly, contact the Director. See Attachment 2 for telephone number.

Flood or Heavy Rain/Wet Situations:

- If regulated wastes enter drainage systems, use great caution removing the wastes – flowing water can have extreme force.
- Wet weather can cause embankments to become weakened and fail.

Non-Flood and Non-Heavy Rain/Wet Situations:

- Prevent the waste from washing away beyond the property boundary.
- Remove the wastes as soon as possible.

Off-Site Releases

Leachate

Leachate must be kept from entering creeks, rivers, streams, or other waterways. Leachate should not be allowed to leave the property boundaries.

If leachate is observed leaving the property boundary and/or entering a creek, river, stream, or other waterway, immediately contact the following:

- Contact the Director. See Attachment 2 for telephone number.
- Contact the State of Iowa. See Attachment 2 for telephone numbers.

Earthen dams, excavation, compaction, and other techniques can be applied to stop the flow of leachate from leaving the property boundary or traveling further from the property boundary.

Permanent drainage systems can be installed after the leachate flow has been diverted or stopped if a lagoon and leachate collection system is available.

Waste Gases

- If waste gases are detected outside of the property boundary, contact the Director.
- A second check of gas concentration levels with newly calibrated equipment may be required.
- If waste gases are detected a second time outside of the property boundary, then contact the DNR immediately (See Attachment 2 for telephone numbers).

Regulated Waste

- Prevent the waste from traveling further off site. Earthen dams, excavation, compaction, and other techniques can be applied to stop the flow of regulated waste from traveling further from the property boundary.
- If the regulated waste is in a waterway, attempt to stop the flow of waste and if possible, stop the flow of waste downstream. Use caution working near steep banks or wet embankments.
- Contact the Director. See Attachment 2 for telephone number.
- Contact the State of Iowa. See Attachment 2 for telephone numbers.

Household Hazardous Materials

Household hazardous materials (especially material that has been bulked) must be kept from entering creeks, rivers, streams, or other waterways. Household hazardous materials should not be allowed to improperly leave the property boundaries.

Household hazardous materials that are released beyond the property and/or are observed to be in a waterway must be managed immediately.

- If possible, safely stop the source of the leak.
- Use absorbent material to stop material from entering the waterway or leaving the site.
- If household hazardous material is observed leaving the property boundary and/or entering a creek, river, stream, or other water, immediately contact the Director – See Attachment 2 for telephone numbers.
- See Attachment 3 – IDNR Spill Release as the type of spill will determine if the DNR must be contacted.

113.8(5)"b"(3)6 Hazardous Material Spills and Releases

- See Attachment 3 for State Guidelines for Reporting Hazardous Conditions.
- Do not smoke. Do not create sparks.
- Be aware of the wind and avoid inhaling hazardous fumes.
- Use caution operating near hazardous materials. The material should be considered hazardous, even if the suspected material has not yet been confirmed hazardous by a professional.
- Do not let people or equipment make contact with liquids, dusts, or fumes of hazardous materials.
- Only trained professionals should attempt to clean up the hazardous materials.
- Do not come into contact with the hazardous material.
- Some hazardous materials can react violently with other chemicals and other materials - use extreme caution.

Load-Check Control Points

Load checking is performed periodically by landfills to identify banned materials, hazardous materials, and wastes that may have been generated from areas outside the solid waste planning boundaries.

If a solid waste load is identified as containing hazardous materials or hazardous markings on containers are identified, contact the following:

- See Attachment 3 for reporting hazardous conditions to the State of Iowa.
- Director - See Attachment 2 for telephone numbers.
- Observe the safety precautions outlined in Section 113.8(5)"b"(3)6 Hazardous Material Spill & Releases.

Mixed Waste Deliveries

See Section 113.8(5)"b"(3)6 Load-Check Control Points, above.

Fuels

Fuels and oils that are spilled can be absorbed with specific material designed for this purpose – they are often called "snakes," "booms," or "pillows." These materials, after use, are moved in drums to a used oil containment area until suitable transport to an off-site disposal location can be arranged.

If a fuel/oil spill occurs:

- Stop the flow of material if possible using valves or switches.
- Do not smoke.
- Do not pass vehicles over the spilled material, as these could be a spark/ignition source hazard.
- If possible, construct an earthen dam or similar structure to contain the spill.

Waste Gases

- If waste gases are detected outside of the property boundary, contact the Director. See Attachment 2 for telephone numbers.
- A second check of gas concentration levels with newly calibrated equipment may be required.
- If waste gases are detected a second time outside of the property boundary, then contact the DNR immediately. See Attachment 2 for telephone numbers.
- If waste gases are detected indoors, ventilate and evacuate the area.

Site Drainage Systems

This generally occurs during flood or heavy rain/flash flood situations.

If hazardous wastes enter drainage systems during flood/heavy rain/wet conditions:

- Contact 911.
- Contact the Director – See Attachment 2 for telephone numbers.
- Contact the State of Iowa – See Attachment 2 for telephone numbers.
- Emergency/Hazardous Material professionals will aid minimize the risk downstream.

If hazardous wastes enter drainage systems during non-flood/heavy rain/wet conditions:

- Prevent the waste from washing beyond the property boundary.
- Get assistance before attempting to remove the wastes.
- Assistance should be obtained from trained professionals.

Off-Site Releases

- Contact 911.
- If possible, construct an earthen dam or similar structure to reduce the spread of contamination. Do not contact the material, contaminated dust, fumes, or gases.
- Should a spill leave the property, staff will notify a hazardous material professional. The trained hazardous material professional will supply needed resources and take charge of the response effort.

In case of an off-site release, the following individuals must be contacted:

- Director - See Attachment 2 for telephone and mobile phone numbers.
- Contact the State of Iowa - See Attachment 2 for telephone numbers.
- See Attachment 3 for reporting hazardous conditions to the State.

113.8(5)"b"(3)7 Mass Movement of Land and Waste

Earthquakes

During an Earthquake

- Duck, cover, and hold. If you are inside, crawl under a heavy piece of furniture and hold on or get under a doorframe.
- If you are outside, stay in an open area.
- If you are in your car or equipment, stop driving.

After an Earthquake

- Check for injuries.
- Get out of the building if it appears to be structurally unsound – do not re-enter the building. If the building is evacuated, go to the Emergency Assembly Point and account for Landfill personnel, contractors, guests, etc.
- Listen to a battery powered radio for further instructions.
- Be aware of broken glass and other sharp objects on the floor.
- Be aware of material above your head that might fall.
- Check water, gas, and electric lines for damage (natural gas odor) then see Attachment 2 for information on utilities.
- Check leachate lagoons for leaks.
- Check stability of stockpiles and slopes. See Section 3.8.1.
- Check methane collection/venting systems.
- Do not use matches or smoke.
- Avoid the telephone.
- Do not go sightseeing.
- Expect aftershocks.
- Have the scale checked and re-certified by a qualified technician.

In case of earthquake, the following individuals must be contacted:

- Director – See Attachment 2 for telephone and mobile phone numbers.

Check Fuel/Solvent Storage Systems Extinguish all smoking and small flames.

- If a spill/leak exists, attempt to stop the leak/spill or absorb fuel/solvent with inert materials.
- If bulk fuel or solvent is leaking into the environment from a storage system, take immediate steps to limit flow into drainage ways by constructing an earthen dam.
- Report spills or leaks to the DNR. See Attachment 2 for emergency contacts.

Slope Failure

Several dangers exist with slope failures including: exposing waste, leachate, bacteria, and other materials to the environment, allowing wastes to leave the site property, allowing wastes to enter wetlands or other regulated environments, and allowing wastes to overrun roads and buildings.

- Perform a head count of employees, contractors, and guests.
- Stay away from other nearby areas that may also be at risk.

Contact the following:

- Director – See Attachment 2 for telephone numbers.
- Call 911 if there are any injuries or if someone may be buried under the failed slope.

Waste Shifts

- Because of the instability of some stockpiles such as compost, some soils, and yard waste, the stockpile face should never be allowed to get higher than 15-20 feet. Borrow pits should also be constructed to ensure side slope stability.
- A professional engineer should be consulted to control side slope and stability.
- Use caution when excavating the "toe" of stockpile. Removing too much material may destabilize the upper portion of stockpile causing it to "slide" or fall down.
- In case of any stockpile slide, the following individuals/companies must be contacted: Director – See Attachment 2 for telephone and mobile phone numbers.
- The DNR should be contacted for large slope failures when waste is exposed or if waste leaves the property boundary.

Waste Subsidence

Settling of large or small areas of the Landfill is a natural occurrence; however, sudden settling may cause changes in slope stability.

Waste subsidence is generally gradual. If a large sinkhole or other large depression is created from subsidence, stay away from the area as additional subsidence may occur.

Large depressions or holes should be reported to the Director.

113.8(5)"b"(3)8 Emergency and Release Notification and Reporting

Emergency reporting and notifications will be provided as needed by state, federal, and local authorities.

Federal Agencies

See Attachment 2 for Emergency Contacts.

State Agencies

See Attachment 2 for Emergency Contacts.

See Attachment 3 for Reporting Hazardous Conditions.

County and City Agencies Including Emergency Management Services

See Attachment 2 for Emergency Contacts.

News Media

See Attachment 2 for Emergency Contacts.

Public and Private Facilities with Special Populations within Five Miles

See Attachment 2 for a list of facilities and phone numbers.

Reporting Requirements and Forms

Emergency reporting requirements and forms will be provided as needed by the state, federal, and local authorities.

113.8(5)"b"(3)9 Emergency Waste Management Procedures

Communications

Communication between Landfill staff and any emergency personnel will be at the direction of the Director if possible. The Director will also advise emergency personnel of factors that may influence the evacuation efforts or response procedures.

The following systems of communication may be used in an emergency.

- A telephone is available at the scale house.
- Cellular/digital telephones are not provided by the facility; however, personal cellular/digital telephones may be available.
- Two-way radios are available at some facilities.
- Honking horns can be used to indicate an emergency.
- Personal communication can also be used to communicate an emergency situation.

Alarm System

- The employer shall establish and educate employees regarding any proposed alarm system.
- An air horn or an automobile horn can be used to alert employees about a dangerous situation.
- Two-way or C.B. radios can be used to alert employees regarding a dangerous situation.

- If possible, person-to-person contact can be used to alert landfill guests, contractors, employees, etc. regarding the dangerous situation.

Temporary Discontinuation of Services – Short-Term and Long-Term

- If telephone service is discontinued, cellular or digital telephones can be used.
- The Director can dispatch messengers to deliver emergency messages in case of a discontinuation of normal communication systems.
- If the facility's transportation, processing, or landfilling services must be discontinued, the Director will contact member municipalities, county governments, and hauling companies as soon as possible to communicate rerouting instructions.

Facilities Access and Rerouting

- The Director will facilitate emergency rerouting.
- If access to the facility is blocked, telephone, radio, and person to person contact at the Landfill will be used to communicate new directions and rerouting.
- The Director will contact alternate disposal sites and arrange for disposal. After the emergency, normal disposal or transportation systems should resume as soon as possible.

Waste Acceptance

- The Director will contact alternate disposal sites and arrange for disposal if needed.
- After the emergency, normal disposal or transportation systems should resume as soon as possible.
- If wastes must be diverted for more than one day, contact the DNR; see Attachment 2 for telephone numbers.

Waste in Process

- During an emergency, safety to human life is a priority.
- Wastes being tipped, processed, or handled must be left in place until the threat to human life is greatly reduced.
- If an emergency does not threaten human life, the Director will decide how best to manage wastes in process depending on the emergency circumstances.
- When the threat to human life is reduced, the waste should be processed according to the facility's permit.

113.8(5)"b"(3)10 Primary Emergency Equipment Inventory

Major Equipment

A bulldozer and an earth scraper are available on site. Private vehicles are also available.

Fire Hydrants and Water Sources

Fire hydrants and water sources, if available, are located on the Site Plan Map (See Attachment 1).

Off-Site Equipment Resources

The facility may contact other municipal and county governments to borrow machinery until replacements can be acquired.

113.8(5)"b"(3)11 Emergency Aid

A commercial first-aid kit will be maintained at the Landfill office. The site supervisor or the staff will administer minor first-aid treatment when required. Serious injuries will be handled through 911 Emergency Services (See Attachment 2).

- In case of accidents occurring outside normal operating hours, it will be the responsibility of the senior staff person to provide first-aid treatment and to arrange for professional assistance if required.
- Call 911, professional emergency aid workers should be notified for injuries needing immediate first aid care.
- See Attachment 2 for Emergency Contacts.
- Director should be notified of any injury (See Attachment 2 for Emergency Contacts).

Responder Contacts

- Contact local 911 Emergency Services – See Attachment 2 for telephone numbers.
- Contact the Director if any injury occurs – see Attachment 2 for telephone numbers.

Medical Services

- Contact 911 before transporting sick or injured individuals in a personal vehicle or non-emergency vehicle.
- Directions to the Hospital are located in Attachment 4.

Contracts and Agreements

- The facility does not have any contracts or agreements for emergency aid.
- 911 service is provided to county businesses and businesses of incorporated cities.

113.8(5)"b"(3)12 ERRAP Training Requirements

During the first year, after the plan is approved by the DNR, existing and new employees will review the contents of the approved ERRAP with the training provider.

The Director should identify hazardous waste contractors that can service the facility in case hazardous materials are accidentally received.

Training Providers

The Director will serve as the training provider, will review the ERRAP with existing and new employees, and will provide any additional training required fulfilling the roles outlined in the ERRAP.

Employee Orientation

New employees are required to review the ERRAP and become familiar with the contents of ERRAP. Attachment 2 (Emergency Contacts) will be provided to each employee.

Annual Training Updates

The Director will provide an annual review of the ERRAP with new and existing employees once per year. New information will be reviewed at that time.

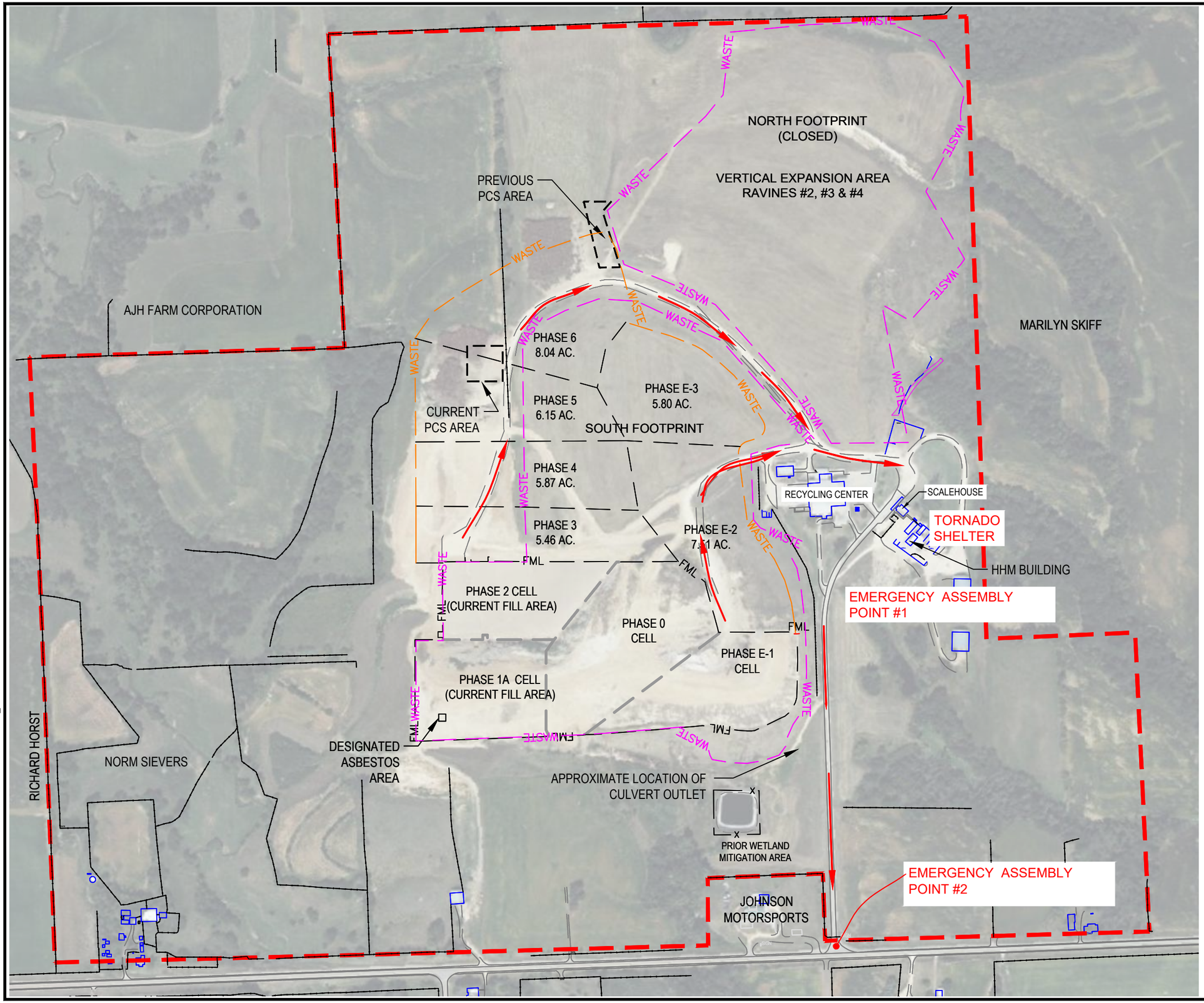
Training Completion and Record Keeping

Records of annual employee ERRAP training will be kept on file at the facility's offices.

Attachment 1

Site Plan Map

Emergency Evacuation Routes
Fire Escape Routes
Tornado Shelter
Emergency Assembly Point
Secondary Emergency Assembly Point



LEGEND:

- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- APPROXIMATE EXISTING WASTE BOUNDARY
- FUTURE WASTE BOUNDARY
- FML BOUNDARY
- APPROXIMATE PROPERTY BOUNDARY
- BUILDING
- GRAVEL ROAD
- PAVED ROAD
- FENCELINE
- EXISTING CELL BOUNDARY
- FUTURE CELL BOUNDARY

400 0 400
SCALE FEET

REV:	DATE	CK BY
	-	-
	-	-
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	-	-
	-	-
	-	-

SHEET TITLE: **SITE MAP**

PROJECT TITLE: **CLINTON COUNTY SANITARY LANDFILL (EAST)**
2025 PERMIT RENEWAL APPLICATION

CLIENT: **CLINTON COUNTY AREA SOLID WASTE AGENCY**
4292 220th St.
CLINTON, IA 52732

SCS ENGINEERS
1690 ALL STATE COURT, SUITE 100
WEST DES MOINES, IA 50265
PH. (515) 631-6160

PROJ.NO.	DWN. BY:	CHK. BY:	PROJ. MGR.
27225264.00	IAC	CLC	CLC
DSN. BY:	IAC		

CADD FILE: SITE MAP_2025.04.04 ERRAP.DWG

DATE: 5/8/25

DRAWING NO. **1**

\\DES-FS01\DESMOINES\PROJECT\27225264.00\AUTOCAD\SITE MAP_2025.04.04 ERRAP.DWG

Attachment 2

Emergency Phone Numbers

Telephone Locations
Fire
Medical
Landfill Management Notification
Media
State of Iowa
EPA
Utilities

EMERGENCY PHONE NUMBERS
Clinton County Sanitary Landfill

TELEPHONE LOCATIONS:

Location of Nearest Telephones .....Scale House (4), Recycling Center (4)

Site Operator Mobile Telephone .....(563) 349-2969 (Jeff Rittmer, Rittmer Inc.)

FIRE:

Fire Department / Rescue .....911 telephone

Sheriff .....911 telephone

MEDICAL / DOCTOR:

Ambulance .....911 telephone

Hospital: Mercy Medical Center Clinton ..... (563) 244-5555 telephone

Estimated Drive Time .....10 minutes (4.4 mi)

Directions to Hospital/Clinic .....Route Directions: See Attachment 4

LANDFILL MANAGEMENT - NOTIFICATION LIST:

Director

Brad Seward ..... (563) 243-4749 telephone

.....(563) 249-2732 mobile telephone

Public Relations / Media

Brad Seward .....See "Director" listing above

COUNTY EMERGENCY MANAGEMENT AGENCY:

Clinton County Emergency Coordinator

Chance Kness ..... (563) 242-5712 telephone

MEDIA:

Television

KWQC TV ..... (563) 383-7000 telephone

WHBF Channel 4 ..... (309) 786-5441 telephone

WQAD Channel 8 ..... (309) 764-8888 telephone

KLJB Channel 18 ..... (309) 786-5441 telephone

Radio

KCLN / KMCN ..... (563) 243-1390 telephone

KCQQ ..... (563) 344-7000 telephone

KJOC ..... (563) 326-2541 telephone

KROS ..... (563) 242-1252 telephone

STATE OF IOWA:

Water Quality Bureau ..... (515) 725-8200 telephone

Environmental Protection Division ..... (515) 725-8694 telephone

IDNR Field Office 6 in Washington, Iowa ..... (319) 653-2135 telephone

Iowa Emergency Management Division ..... (515) 725-3231 telephone

IDNR Spill Response ..... (515) 725-8694 24-hour telephone

EPA:

Region 7 ..... (913) 551-7003 telephone

..... (913) 281-0991 24-hour telephone

UTILITIES:

Telephone

Windstream ..... (844) 606-1489 telephone

Water

American Water ..... .(866) 641-2108 telephone

Electricity

Alliant Energy ..... (800) 255-4268 telephone

Propane

River Valley Cooperative ..... (563) 659-8179 telephone

Eastern Iowa Propane ..... (563) 285-7820 telephone

ENGINEER OF RECORD:

SCS Engineers..... (515) 631-6160 telephone

Attachment 3

Iowa Department of Natural Resources

Guidelines for Reporting Hazardous Conditions

Including Iowa Administrative Code Chapter 131

"Notification of Hazardous Conditions"

CHAPTER 131
NOTIFICATION OF HAZARDOUS CONDITIONS

[Prior to 7/1/83, DEQ Ch 41]
[Prior to 12/3/86, Water, Air and Waste Management[900]]

Chapter rescission date pursuant to Iowa Code section 17A.7: 1/1/28

567—131.1(455B) Definitions. For purposes of this chapter:

"Corrosive" means causing or producing visible destruction or irreversible alterations in human skin tissue at the site of contact, or in the case of leakage of a hazardous substance from its packaging, causing or producing a severe destruction or erosion of other materials through chemical processes.

"Department" means the department of natural resources.

"Hazardous condition" means any situation involving the actual, imminent or probable spillage, leakage, or release of a hazardous substance onto the land, into a water of the state or into the atmosphere which, because of the quantity, strength and toxicity of the hazardous substance, its mobility in the environment and its persistence, creates an immediate or potential danger to the public health or safety or to the environment.

"Hazardous substance" means any substance or mixture of substances that presents a danger to the public health or safety and includes, but is not limited to, a substance that is toxic, corrosive, or flammable, or that is an irritant or that, in confinement, generates pressure through decomposition, heat, or other means. The following are examples of substances which, in sufficient quantity, may be hazardous: acids; alkalis; explosives; fertilizers; heavy metals such as chromium, arsenic, mercury, lead and cadmium; industrial chemicals; paint thinners; paints; pesticides; petroleum products; poisons; radioactive materials; sludges; and organic solvents. "Hazardous substances" may include any hazardous waste identified or listed by the administrator of the United States Environmental Protection Agency under the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, or any toxic pollutant listed under Section 307 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous substance designated under Section 311 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous material designated by the secretary of transportation under the Hazardous Materials Transportation Act (49 CFR §172.101).

"Irritant" means a substance causing or producing dangerous or intensely irritating fumes upon contact with fire or when exposed to air.

"Toxic" means causing or producing a dangerous physiological, anatomic or biochemical change in a biological system.

567—131.2(455B) Report of hazardous conditions. Any person manufacturing, storing, handling, transporting, or disposing of a hazardous substance shall notify the department at (515)281-8694 and the local police department or the office of the sheriff of the affected county of the occurrence of a hazardous condition as soon as possible but not later than six hours after the onset of the hazardous condition or discovery of the hazardous condition. A sheriff or police chief who has been notified of a hazardous condition shall immediately notify the department. Reports made pursuant to this rule shall be confirmed in writing as provided in 131.2(2).

131.2(1) *Verbal report.* The verbal report of such a hazardous condition should provide information on as many items listed in 131.2(2) as available data will allow.

131.2(2) *Written report.* The written report of such a hazardous condition shall be submitted to the department within 30 days and contain the following information:

a. The exact location of the hazardous condition.

b. The time and date of onset or discovery of the hazardous condition.

c. The name of the material, the manufacturer's name and the volume of each material involved in the hazardous condition in addition to contaminants within the material if they by themselves could cause a hazardous condition.

d. The medium (land, water or air) in which the hazardous condition occurred or exists.

e. The name, address and telephone number of the party responsible for the hazardous condition.

f. The time and date of the verbal report to the department of the hazardous condition.

g. The weather conditions at the time of the hazardous condition onset or discovery.

h. The name, mailing address and telephone number of the person reporting the hazardous condition.

i. The name and telephone number of the person closest to the scene of the hazardous condition who can be contacted for further information and action.

j. Any other information, such as the circumstances leading to the hazardous condition, visible effects and containment measures taken that may assist in proper evaluation by the department.

131.2(3) *Reporting of subsequent findings.* All subsequent finding and laboratory results should be reported and submitted in writing to the department as soon as they become available.

These rules are intended to implement Iowa Code section 455B.115.

[Filed 2/3/78, Notice 10/5/77—published 2/22/78, effective 3/29/78]
[Filed emergency 10/31/80—published 11/26/80, effective 10/31/80]
[Filed emergency 6/3/83—published 6/22/83, effective 7/1/83]
[Filed emergency 11/14/86—published 12/3/86, effective 12/3/86]
[Filed 12/30/93, Notice 10/13/93—published 1/19/94, effective 2/23/94]

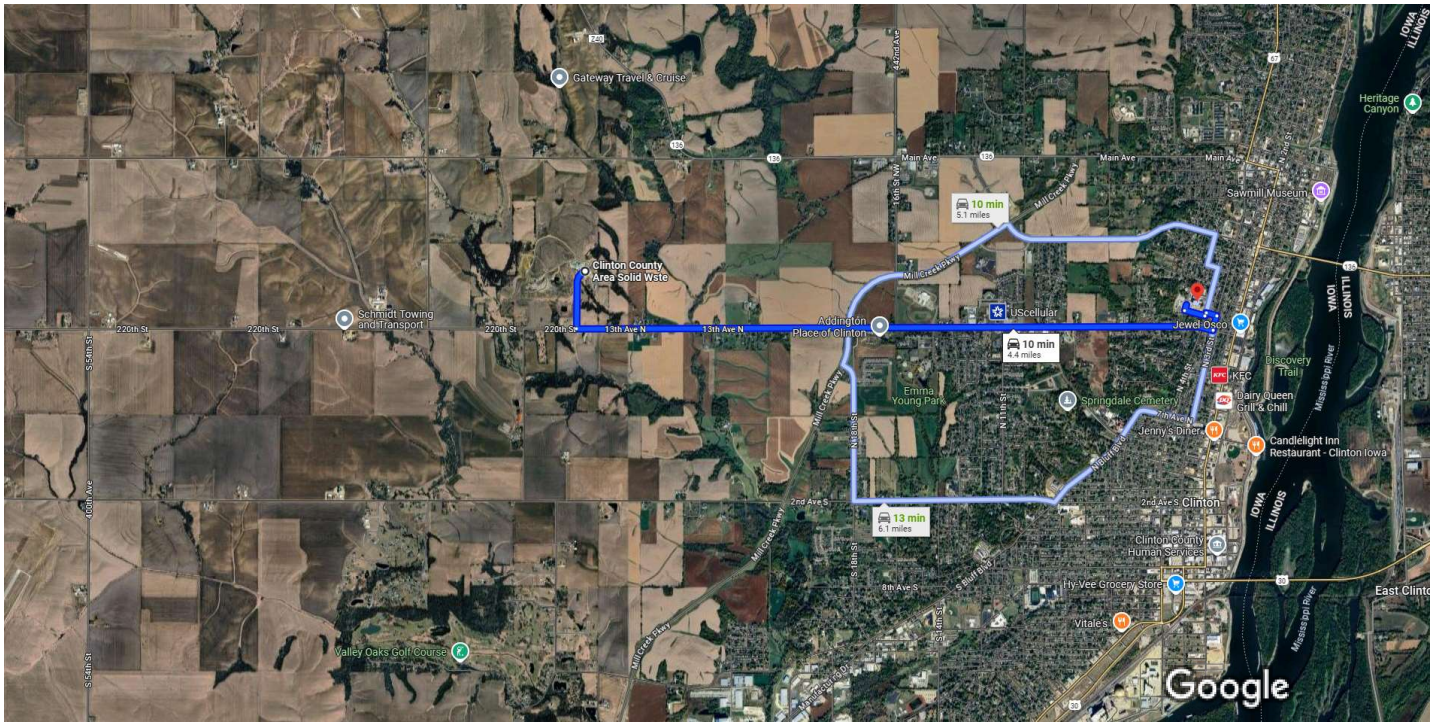
Attachment 4

Directions to Hospital/Clinic

Google Maps

Clinton County Area Solid Wste, 4292 220th St, Clinton, IA 52732 to MercyOne Clinton Medical Ctr, 1410 N 4th St, Clinton, IA 52732

Drive 4.4 miles, 10 min



Imagery ©2025 Airbus, CNES / Airbus, Landsat / Copernicus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2025 Google 2000 ft

Clinton County Area Solid Wste
4292 220th St, Clinton, IA 52732

1. Head southwest toward 13th Ave N/220th St
   0.4 mi
2. Turn left onto 13th Ave N/220th St
   Continue to follow 13th Ave N
   3.7 mi
3. Turn left onto N 3rd St
   476 ft
4. Turn left at the 1st cross street onto 14th Ave N
   338 ft
5. Turn left onto N 4th St
   105 ft
6. Turn right onto 14th Ave N
   0.1 mi
7. Turn right
   184 ft

MercyOne Clinton Medical Ctr
1410 N 4th St, Clinton, IA 52732

Attachment 5

Special Populations Within Five Mile Radius

AT-RISK POPULATIONS WITHIN A 5-MILE RADIUS

HOSPITALS:

MercyOne Clinton Medical Center, 1410 N. 4th St., Clinton, IA..... (563) 244-5555

Community Health Care Inc., Clinton Clinic – 925 S 4th St, Clinton, IA 52732..... (563) 336-3000

SCHOOLS:

Bluff Elementary School, 1421 S. Bluff Blvd., Clinton, IA..... (563) 242-1606

Camanche High School, 937 9th Ave., Camanche, IA..... (563) 259-3008

Camanche Middle School, 1400 9th St, Camanche, IA 52730 ..... (563) 259-3014

CCC Technology Center, 1951 Manufacturing Dr., Clinton, IA..... (563) 244-7010

Clinton High School, 817 8th Ave. S., Clinton, IA..... (563) 243-7540

Clinton Middle School, 1350 14th Ave. N.W., Clinton, IA..... (563) 243-0466

Eagle Heights Elementary School, 1350 Main Ave., Clinton, IA..... (563) 243-4288

Jefferson Elementary School, 720 4th Ave. S., Clinton, IA..... (563) 243-0479

Prince of Peace High School, 312 S. 4th St., Clinton, IA..... (563) 242-1663

Whittier Elementary School, 1310 2nd Ave. S., Clinton, IA..... (563) 243-3230

NURSING HOMES/ASSISTED LIVING:

Addington Place of Clinton, 1701 13th Ave N, Clinton, IA..... (563) 243-6870

Alverno Senior Care Facility, 849 13th Ave. N., Clinton, IA..... (563) 242-1521

Bickford of Clinton, 1150 13th Ave. N., Clinton, IA..... (563) 278-2294

Eagle Point Health Care Center, 801 28th Ave. N., Clinton, IA..... (563) 243-6600

Park Vista Retirement Living, 1810 Park Vista Dr., Camanche, IA..... (563) 447-7447

Regency Retirement Residence, 839 13th Ave N., Clinton, IA..... (563) 242-1010

Sarah Harding Home, 308 S. Bluff Blvd., Clinton, IA ..... (563) 243-1341

Village Cooperative, 1160 14th Ave. N.W., Clinton, IA ..... (563) 219-8656

DAY CARE CENTERS:

Clinton Housing Authority Daycare, 1811 27th Ave. S., Clinton, IA ..... (563) 242-1214

Head Start, 350 5th Ave. N., Clinton, IA ..... (563) 243-1462

Kiddie Kollege, 1605 13th Ave. N., Clinton, IA..... (563) 241-5826

Kid's Kove, 735 N 13th St. Clinton, IA 52732.....(563) 278-7575

Klassy Kids Korner, 314 3rd Ave. N, Clinton, IA.....(563) 243-6396

Prince of Peace Preschool, 245 26th Ave. N., Clinton, IA ..... (563) 242-9258

Wee School for Little People, 949 12th Ave. N., Clinton, IA..... (563) 243-6650

YWCA Children's Center, Downtown, 317 7th Ave. S., Clinton, IA ..... (563) 244-8340

YWCA Children's Center, Lyons, 250 20th Ave. N., Clinton, IA ..... (563) 242-2190

Zion Child Care Preschool, 430 3rd Ave. S., Clinton, IA..... (563) 243-9393

Appendix D

Proof of Financial Assurance

IOWA DEPARTMENT OF NATURAL RESOURCES

GOVERNOR KIM REYNOLDS
LT. GOVERNOR ADAM GREGG

DIRECTOR KAYLA LYON

May 5, 2025

BRAD SEWARD
DIRECTOR OF OPERATIONS
CLINTON COUNTY AREA SOLID WASTE AGENCY
4292 220TH STREET
PO BOX 996
CLINTON IA 53732

Re: Clinton County Area Solid Waste Agency
Permit No. 23-SDP-01-74P
2025 Financial Assurance Approval

Dear Mr. Seward:

This is notification by the Iowa Department of Natural Resources (DNR) that the Clinton County Area Solid Waste (Agency) has adequately complied with the financial assurance requirements of 567 IAC 113.14(455B) for the Agency's landfill. The Agency's financial assurance documentation (Doc #112709), dated April 1, 2025, has been placed in the DNR's record files.

The projected deposit of **$235,063** to the Agency's closure and post-closure Local Government Dedicated Fund (LGDF) needs to be made by July 30, 2025. The deposit amounts are as stated in the "Formula for Projected Deposits" component of Section 7 of the Agency's Financial Assurance Report Forms.

Please note that the Agency may withdraw money from the closure and post-closure LGDF without DNR approval for the purpose of funding closure, including partial closure, or post-closure activities in accordance with 567 IAC 113.14(8)"d." As a reminder, compliance with 567 IAC 113.14(455B) is to be submitted annually, by April 1st, confirming that all applicable financial assurance documents are updated as required.

Please feel free to contact me with any questions. I can be reached at (515) 802-8835 or mary.klemesrud@dnr.iowa.gov.

Sincerely,

Mary Klemesrud
Digitally signed by Mary Klemesrud
Date: 2025.05.05 15:58:06 -05'00'

Mary Klemesrud
Program Planner
Land Quality Bureau

Cc: Christine Collier, P.E., SCS Engineers
Chris Calhoun, SCS Engineers
Iowa DNR Field Office #6, Washington

Appendix E

Comprehensive Plan

iowa.gov

Rasmus, Laurie <laurie.rasmus@dnr.iowa.gov>

Rnd8 Comp Plan Update approved_Bi-State

1 message

Rasmus, Laurie <laurie.rasmus@dnr.iowa.gov> Fri, Jul 21, 2023 at 10:36 AM
To: Gena McCullough <gmccullough@bistateonline.org>, Gary Crock <ccswc@netins.net>, Brad Seward <ccaswa@ccaswa.com>, Frank Frieberg <frankf@wasteauth.org>, David Popp <dpopp@muscatineiowa.gov>, Kathy Morris <kathy.morris@wastecom.com>
Cc: Jennifer Wright <jennifer.wright@dnr.iowa.gov>, Michael Sullivan <michael.sullivan@dnr.iowa.gov>, "Jolly, Becky" <becky.jolly@dnr.iowa.gov>, Kurt Levetzow <kurt.levetzow@dnr.iowa.gov>, Shane Dodge <shane.dodge@dnr.iowa.gov>, Julie Plummer <Julie.plummer@wastecom.com>

DNR IOWA DEPARTMENT OF NATURAL RESOURCES

GOVERNOR KIM REYNOLDS
LT. GOVERNOR ADAM GREGG
DIRECTOR KAYLA LYON

Ms. Gena McCullough
Bi-State Regional Commission

Dear Ms. Gena McCullough:

BI-STATE REGIONAL COMMISSION
8th Round Solid Waste Comprehensive Plan Update
NOTICE OF APPROVAL

The above-referenced agency submitted their plan update regarding integrated solid waste programs and activities. Information was included regarding proposed activities that represent an action plan for the next five years.

As noted in a previous letter on May 10, 2023 and according to the 8th Round Schedule, DNR determined the official planning area Goal Progress as 16.83% for Fiscal Year 2022. This figure was determined using the Base-Year Adjustment Method. Goal Progress may be recalculated annually, once new data is available and upon request by the planning area. Beginning July 1, 2023, the tonnage fees for service areas that are not within a designated Iowa Solid Waste Environmental Management System (EMS). Questions regarding tonnage fee submission may be directed to Becky Jolly at 515-249-1482 or becky.jolly@dnr.iowa.gov.

Should you have any questions or concerns, please do not hesitate to contact me at Laurie.Rasmus@dnr.iowa.gov or 515-474-4921.

Sincerely,

Laurie Rasmus
Land Quality Bureau, Financial and Business Assistance

5 attachments

- **CkIst_Rnd8 BiState_Final_07-21-2023.pdf** 339K
- **Bi-State GP FY22_Rnd 8 FINAL.pdf** 184K
- **Tonnage Fee Distribution_Fact Sheet(3)_rev June 2020.pdf** 433K
- **Rnd8Update&Addendum_Bi-State.pdf** 6213K
- **Rnd8 TonFeeChange&Extension_Bi-State_5-10-2023.pdf** 127K

BASE-YEAR ADJUSTMENT METHOD REPORT TABLE

NAME OF PLANNING AREA: Bi-State Regional Commission

CURRENT YEAR (CY): FY2022_Complete 09-29-2022
BASE YEAR: FY1988

FACTORS	Cedar	Clinton	Jackson	Muscatine	Scott	Region	NOTES
STEP 1: Basic Information							
1 Base Year Residential Waste Disposal	5,176	32,375	4,185	12,592	47,752	102,080	A
2 Base Year Commercial/Industrial Waste Disposal	6,976	52,823	7,774	50,448	111,369	229,390	B
3 Base Year Total Waste Disposal	12,152	85,198	11,959	63,040	159,121	331,470	
4 CY Waste Disposal	10,374	53,201	11,713	42,169	190,511	307,972	G
5 Base Year Population	17,632	52,256	20,461	40,013	152,788	283,150	C
6 CY Population	18,505	46,460	19,485	43,235	174,669	302,354	H
7 Base Year Employment	4,206	18,747	5,168	18,585	66,542	113,248	D
8 CY Employment	5,036	19,388	5,961	21,611	88,298	140,295	I
9 Base Year Taxable Sales	54,182,138	262,808,687	72,735,695	207,764,780	1,105,183,664	1,702,674,964	E
10 CY Taxable Sales	$121,710,171	$502,414,027	$145,539,720	$481,622,068	$2,949,767,848	4,201,053,834	J
11 Base Year Consumer Price Index	115.8417	115.8417	115.8417	115.8417	115.8417	115.8417	F
12 CY Consumer Price Index	282.0250	282.0250	282.0250	282.0250	282.0250	282.0250	K, FY2022
STEP 2: CY Taxable Sales Corrected for Inflation							
13 Inflation Correction Factor	0.4107498	0.4107498	0.4107498	0.4107498	0.4107498	0.4107498	F/K
14 CY Corrected Taxable Sales	$49,992,423	$206,366,439	$59,780,405	$197,826,147	$1,211,616,424	$1,725,581,838	J*(F/K)
STEP 3: Base Year and Current Year Ratios							
15 Population Ratio (PR)	1.0495123	0.8890845	0.9522995	1.0805238	1.1432115	1.0678227	H/C
16 Employment Ratio (ER)	1.1974164	1.0341966	1.1534926	1.1628329	1.3269527	1.2388298	I/D
17 Taxable Sales Ratio (TR)	0.9226735	0.7852345	0.8218854	0.9521640	1.0963032	1.0134535	(J*F/K)/E
STEP 4: Adjustment Factors							
18 Base Year Commercial/Industrial Adjustment Factor	1.0600449	0.9097155	0.9876890	1.0574985	1.2116279	1.1261416	Average of Lines 16 & 17
19 Base Year Residential Adjustment Factor	1.0547786	0.8994000	0.9699943	1.0690112	1.1774197	1.0969822	Average of Lines 15 & 18
STEP 5: Adjusted Base Year Disposal Tonnages							
20 Base Year Adjusted Residential Waste Disposal	5,460	29,118	4,059	13,461	56,224	111,980	A * Line 19
21 Base Year Adjusted Commercial/Industrial Waste Disposal	7,395	48,054	7,678	53,349	134,938	258,326	B * Line 18
22 Base Year Adjusted Total Waste Disposal	12,854	77,172	11,738	66,810	191,162	370,306	
STEP 6: Goal Progress and Reduction Percentage Results							
23 CY Waste Disposal (from line #4)	10,374	53,201	11,713	42,169	190,511	307,972	G
24 Maximum Allowable Disposal to Attain 25 Percent Goal	9,641	57,879	8,803	50,107	143,371	277,729	Line 22*0.75
25 Actual Tonnage Over (or Under) 25 Percent Goal	733	-4,678	2,910	-7,938	47,139	30,242	Line 23 minus Line 24
26 Maximum Allowable Disposal to Attain 50 Percent Goal	6,427	38,586	5,869	33,405	95,581	185,153	Line 22*0.5
27 Actual Tonnage Over (or Under) 50 Percent Goal	3,947	14,615	5,844	8,764	94,930	122,819	Line 23 minus Line 26
28 CURRENT DISPOSAL REDUCTION (PERCENTAGE)	**19.30%**	**31.06%**	**0.21%**	**36.88%**	**0.34%**	**16.83%**	**(Line 22 minus Line 23)/Line 22**

Planning Area (PA)	County	City	2020 Census	PA Pop. (H)	Pop. % in PA	FY2022 Non-Farm Jobs	Non-Farm Jobs in PA (I)	FY2021 Taxable Sales (J)
Bi-State	Cedar	Bennett	347	347				$2,066,715
Bi-State	Cedar	Clarence	1,039	1,039				$5,393,839
Bi-State	Cedar	Durant	1,871	1,871				$19,202,442
Bi-State	Cedar	Lowden	807	807				$9,020,401
Bi-State	Cedar	Mechanicsville	1,020	1,020				$3,995,054
Bi-State	Cedar	Stanwood	637	637				$2,827,238
Bi-State	Cedar	Tipton	3,149	3,149				$54,314,996
Bi-State	Cedar	West Branch	2,509	2,509				$20,707,363
Bi-State	Cedar	zz.Uninc area	7,126	7,126				$4,182,123
			18,505	**18,505**	**100%**	**5,036**	**5,036**	**$121,710,171**
Bi-State	Clinton	Andover	109	109				$0
Bi-State	Clinton	Calamus	356	356				$2,328,357
Bi-State	Clinton	Camanche	4,570	4,570				$13,493,380
Bi-State	Clinton	Charlotte	389	389				$3,237,034
Bi-State	Clinton	Clinton	24,469	24,469				$380,445,866
Bi-State	Clinton	Delmar	542	542				$3,631,092
Bi-State	Clinton	DeWitt	5,514	5,514				$76,807,247
Bi-State	Clinton	Goose Lake	239	239				$1,285,711
Bi-State	Clinton	Grand Mound	615	615				$3,678,702
Bi-State	Clinton	Lost Nation	434	434				$1,589,635
Bi-State	Clinton	Low Moor	250	250				$2,597,931
Bi-State	Clinton	Toronto	102	102				$0
Bi-State	Clinton	Welton	121	121				$1,180,843
Bi-State	Clinton	Wheatland	775	775				$8,350,663
Bi-State	Clinton	zz.Uninc area	7,975	7,975				$3,787,566
			46,460	**46,460**	**100%**	**19,388**	**19,388**	**$502,414,027**
Bi-State	Jackson	Andrew	380	380				$850,260
Bi-State	Jackson	Baldwin	99	99				$0
Bi-State	Jackson	Bellevue	2,363	2,363				$24,212,208
Bi-State	Jackson	La Motte	237	237				$2,534,409
Bi-State	Jackson	Maquoketa	6,128	6,128				$92,394,514
Bi-State	Jackson	Miles	408	408				$2,200,097
Bi-State	Jackson	Monmouth	129	129				$0
Bi-State	Jackson	Preston	949	949				$12,964,042
Bi-State	Jackson	Sabula	506	506				$3,877,936
Bi-State	Jackson	Spragueville	92	92				$147,291
Bi-State	Jackson	Springbrook	143	143				$743,949
Bi-State	Jackson	St. Donatus	120	120				$0
Bi-State	Jackson	zz.Uninc area	7,931	7,931				$5,615,014
			19,485	**19,485**	**100%**	**5,961**	**5,961**	**$145,539,720**
Bi-State	Muscatine	Atalissa	296	296				$382,477
Bi-State	Muscatine	Conesville	352	352				$465,872
Bi-State	Muscatine	Fruitland	963	963				$355,248
Bi-State	Muscatine	Muscatine	23,797	23,797				$405,815,071
Bi-State	Muscatine	Nichols	340	340				$3,961,560
Bi-State	Muscatine	Stockton	176	176				$0
Bi-State	Muscatine	West Liberty	3,858	3,858				$21,467,935
Bi-State	Muscatine	Wilton	2,924	2,924				$44,770,271
Bi-State	Muscatine	zz.Uninc area	10,529	10,529				$4,403,634
			43,235	**43,235**	**100%**	**21,611**	**21,611**	**$481,622,068**
Bi-State	Scott	Bettendorf	39,102	39,102				$383,412,323
Bi-State	Scott	Blue Grass	1,666	1,666				$18,118,842
Bi-State	Scott	Buffalo	1,176	1,176				$7,449,309
Bi-State	Scott	Davenport	101,724	101,724				$2,302,474,496
Bi-State	Scott	Dixon	202	202				$385,384
Bi-State	Scott	Donahue	335	335				$1,216,904
Bi-State	Scott	Eldridge	6,726	6,726				$71,387,616
Bi-State	Scott	Le Claire	4,710	4,710				$24,303,336
Bi-State	Scott	Long Grove	838	838				$3,463,132
Bi-State	Scott	Maysville	156	156				$0
Bi-State	Scott	McCausland	313	313				$1,319,476
Bi-State	Scott	New Liberty	138	138				$400,460
Bi-State	Scott	Panorama Park	139	139				$0
Bi-State	Scott	Princeton	923	923				$3,528,807
Bi-State	Scott	Riverdale	379	379				$1,617,978
Bi-State	Scott	Walcott	1,551	1,551				$76,788,333
Bi-State	Scott	zz.Uninc area	14,591	14,591				$53,901,452
			174,669	**174,669**	**100%**	**88,298**	**88,298**	**$2,949,767,848**
Bi-State	**All**	**All**		**302,354**			**140,295**	**##############**
				H			**I**	**J**

PA	Permit #	Facility	FY2022 Tons, Non Exempt	Released (non HF399) ton another IA PA (+)	From another IA PA (non HF 399) (-)	Generated Out of Iowa (-)	Diposed out of Iowa (+)	Exceptional Event (-)	FY2022 PA Tons (G)
Bi-State	23-SDP-01-74	Clinton County Sanitary Landfill (East Site)	53,201						53,201
Bi-State	70-SDP-02-75	Muscatine County Sanitary Landfill	42,169						42,169
Bi-State	70-SDP-11-94	City of Muscatine Transfer Station	Included in MCSL tonnage						
Bi-State	82-SDP-09-92	Scott Area Sanitary Landfill	190,511						190,511
Bi-State	16-SDP-02-88	Cedar County Transfer Station					10,374		10,374
Bi-State	49-SDP-03-92	Waste Authority of Jackson County Transfer Station					11,713		11,713
Bi-State	All			4					4
									307,972

Note: Final disposal site for Cedar County Transfer Station is Millennium Waste, Milan IL;
Final disposal site for Waste Authority of Jackson County Transfer Station is the Quad Cities Landfill in Milan, IL;
Final disposal site for City of Muscatine Transfer Station is Muscatine County Sanitary Landfill.