March 2, 2026

Alexis Slade
Environmental Engineer
Iowa Department of Natural Resources
6200 Park Avenue, Suite 200
Des Moines, Iowa 50321

RE: SDP PERMIT RENEWAL
SOUTH CENTRAL IOWA SLF
IDNR PERMIT NO. 61-SDP-01-78P
HLW PN 6022-23A.330

Dear Ms Slade:

Enclosed for review and approval is the completed IDNR Form 50 for the South Central Iowa Sanitary Landfill and documentation supporting the permit renewal application. The SDP Permit for the South Central Iowa Sanitary Landfill expires on July 12, 2026.

Please let me know if you have any questions.

Respectfully Submitted,
HLW Engineering Group

Douglas J. Luzbetak, P.E.
Project Manager

cc: Marcia Beeler, Landfill Manager, South Central Iowa SLF (*1 hard copy, electronic copy*)

SOUTH CENTRAL IOWA SANITARY LANDFILL

2026 MUNICIPAL SOLID WASTE PERMIT RENEWAL

IDNR PERMIT NO. 61-SDP-01-78P

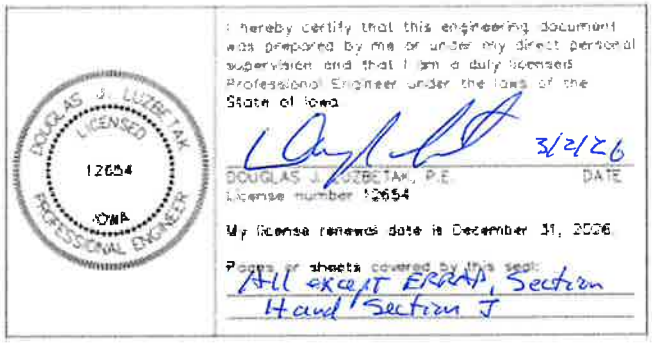
HLW Engineering Group, LLC
204 West Broad Street, PO Box 314
Story City, Iowa 50248
(515) 733-4144

HLW Project Number 6022-23A

2026 MUNICIPAL SOLID WASTE LANDFILL PERMIT RENEWAL

SOUTH CENTRAL IOWA SANITARY LANDFILL

IDNR PERMIT NO. 61-SDP-01-78P



Prepared by
HLW Engineering Group, LLC
Consulting Engineers
Story City, Iowa 50248

HLW PN 6022-23A

IOWA DEPARTMENT OF NATURAL RESOURCES

Municipal Solid Waste Landfill

PERMIT APPLICATION FORM 50

☐ New Permit
☒ Permit Renewal (permit number) 61 - SDP - 01 - 78 MLF
☐ Closure Permit

SECTION 1: PERMIT APPLICATION REQUIREMENTS

Owner of site

Name: South Central Iowa Landfill Agency Phone: 515-739-1915
Address: 2520 Highway 92 Fax:
City, State, Zip: Winterset, IA 50273 E-mail: scilamab@aol.com

Certified Operator Responsible for Operation at Facility

Name: Marcia Beeler Phone: 515-739-1915
Address: 2520 Highway 92 Fax:
City, State, Zip: Winterset, IA 50273 E-mail: scilamab@aol.com

Permit Applicant

Name: South Central Iowa Landfill Agency Phone: 515-739-1915
Address: 2520 Highway 92 Fax:
City, State, Zip: Winterset, IA 50273 E-mail: scilamab@aol.com

Design Engineer (PE)

Name: Douglas J. Luzbetak, P.E. Phone: 515-733-4144
Address: 204 W. Broad, PO Box 314 Fax: 515-733-4146
City, State, Zip: Story City, IA 50248 E-mail: dluzbetak@hlwengineering.com
Iowa Engineer License #: 12654 Expiration Date: 12/31/26

Responsible Official for the Facility

Name: Diane Fitch, Chair Phone: 515-739-1915
Address: 2520 Highway 92 Fax:
City, State, Zip: Winterset, IA 50273 E-mail: scilamab@aol.com

Agency and Responsible Official of Agency Served (if any)

Name: South Central Iowa Landfill Agency Phone: 515-739-1915
Address: 2520 Highway 92 Fax:
City, State, Zip: Winterset, IA 50273 E-mail: scilamab@aol.com

Facility

Name: South Central Iowa Sanitary Landfill
Address: 2520 Highway 92 City, State, Zip: Winterset, IA 50273
Legal Description:
See Doc #99511

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

Planning Area Name: South Central Iowa Landfill Agency

Date of Last Approved Plan: 2/14/22

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

All cities and unincorporated areas of Madison County, excluding Macksburg; all cities and unincorporated areas of Warren County, excluding Carlisle, Hartford, and Norwalk; the Dallas County cities of Dallas Center, De Soto, Dexter, and Van Meter; and the City of Osceola in Clarke County.

Population Served: 60,033 (from 8th Round Comprehensive Plan Update)

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: 99511

☒ 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: _____

☒ 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: _____

☐ 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: NA

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

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

☒ 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: 99511, 101889

☒ 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: _____

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: Marcia Beeler **Date:** 7-1-2026

Printed Name: Marcia Beeler **Title:** Manager

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

SECTION A

Executive Summary

EXECUTIVE SUMMARY

Summary of Modifications to the approved Plans and Specifications:

Numerous modifications have been made to the approved Plans and Specifications during the current permit cycle. The following have been modified and included in this permit renewal documentation:

An updated Organizational Chart is included in Section B.

A Site Exploration and Characterization Report (SECR) was included in the 2021 Permit Renewal Documentation (Doc #99511). The SECR was approved by IDNR as per Special Provision X.2.b.1) of the SDP Permit. The approved SECR is still applicable.

Updated design plans and specifications along with an updated Quality Control and Assurance (QC&A) Plan is included in Section D.

An updated Development and Operations Plan along with an updated Emergency Response and Remedial Action Plan and current Operator Certification numbers are included in Section E.

An updated "Environmental Monitoring Plan" is included in Section F.

Current proof of Financial Assurance is included in Section H.

A Closure/Post-Closure Plan (CPCP) was included in the 2021 Permit Renewal Documentation (Doc #99511). Additional information was submitted on December 16, 2021 (Doc #101889). The information has been approved by IDNR as per Special Provision X.2.b.4) of the SDP Permit. Updates to the approved Closure/Post-Closure Plan are included in Section I.

Current Comprehensive Plan approval is included in Section J.

Summary of each Special Provision of the existing SDP Permit:

1. This provision should be updated to include the February 14, 2022 approval of the 8th Round Solid Waste Comprehensive Plan update for the South Central Iowa Landfill Agency. Documentation on the approval is included in Section J.
2. A new Development and Operations Plan is included in Section E of this permit renewal documentation. An updated Emergency Response and Remedial Action Plan (ERRAP) is included in Appendix 2 of Section E.
3. Updated design plans are included in Section D.
4. Hydrologic monitoring shall be as per the Hydrologic Monitoring System Plan (HMSP) contained in the Environmental Monitoring Plan (EMP) included in Section F.
5. No changes.
6. Gas monitoring shall be as per the Gas Monitoring System Plan (GMSP) contained in the

EMP included in Section F.

7. No changes.
8. No changes.
9. No changes.
10. No changes.
11. No changes.
12. No changes.
13. Updates to the approved Closure/Postclosure Plan are included in Section I.

Summary of each Permit Amendment:

No amendments have been issued during this permit period as IDNR has issued Permit Revisions to replace permit amendments. The following Permit revisions have been issued:

- Permit Revision #1, March 3, 2022
- Permit Revision #2, August 30, 2022
- Permit Revision #3, February 9, 2023
- Permit Revision #4, June 16, 2023
- Permit Revision #5, August 14, 2023
- Permit Revision #6, August 24, 2023
- Permit Revision #7, December 11, 2023
- Permit Revision #8, December 21, 2023
- Permit Revision #9, August 19, 2024
- Permit Revision #10, November 18, 2024
- Permit Revision #11, December 3, 2025

All of the items added during each permit revision have been incorporated into the SDP Permit.

Summary of new Permit Amendment Requests:

None.

Summary of Equivalency Review Requests:

None at this time.

Summary of new Variance Requests:

None at this time.

SECTION B

Organizational Chart

South Central Iowa Sanitary Landfill

Organization Chart

February, 2026

South Central Iowa Landfill Agency (28E organization)

Marcia Beeler, Manager, Certified Landfill Operator (#30033)

Alan Utsler, Certified Landfill Operator (#30474)

Verl Dillinger, Certified Landfill Operator (#30984)

SECTION C

Site Exploration and Characterization Report

SITE EXPLORATION AND CHARACTERIZATION REPORT

A Site Exploration and Characterization Report was included in the 2021 Permit Renewal Documentation (Doc #99511). The documentation was approved by IDNR as per Special Provision X.2.b.1) of the SDP Permit. The approved Site Exploration and Characterization Report is still applicable.

SECTION D

Design Plans and Specifications
Quality Control and Assurance Plans

DESIGN PLANS AND SPECIFICATIONS
QUALITY CONTROL AND ASSURANCE PLAN

113.7(1) Predesign Meeting with the Department

Predesign meetings will be scheduled as applicable. If designs are in general conformance with the rules and previously submitted documentation, a predesign meeting may be not be necessary.

113.7(2) Plans and Specifications

Plans and specifications for all MSWLF units will be submitted to the IDNR for review prior to construction. Submittals to IDNR for each new MSWLF unit will include leachate generation calculations to account for leachate generated from the new disposal area(s) and other applicable documentation.

Figures showing typical future landfill layout, development, and construction details are included in Appendix 1 of this Section.

113.7(3) General Site Design and Construction Requirements

The facility currently meets all requirements in this subrule. A copy of the scale license that expires on December 31, 2026 is included in Appendix 2 of this Section.

113.7(4), MSWLF Unit Subgrade

The general requirements for the subgrade of MSWLF units are discussed in the Quality Control and Assurance (QC&A) Plan included in Appendix 3 of this Section.

MSWLF units will be designed so settlement or swell of the subgrade does not cause or contribute to failure of the liner and/or leachate collection system. Subgrade settlement calculations will be submitted to IDNR as warranted with plans and specifications for each new disposal area.

113.7(5) MSWLF Unit Liners and Leachate Collection Systems

a. Liner Systems
   (1) The current plan is for all future solid waste disposal areas to be constructed with Subtitle D compliant composite liners.

b. Leachate Collection System
   (1) The leachate collection system will be designed and constructed to function for the entire active life of the facility and the postclosure period.

(2) The leachate collection system will be constructed with HDPE piping. HDPE is resistant to the majority of chemicals typically found in leachate from a municipal waste landfill. Calculations for a theoretical pipe loading of 200 feet of fill (waste and final cap) over the liner were included in the 2021 Permit Renewal Documentation (Doc #99511). This fill height is greater than future fill heights based on current design parameters. These calculations show that 8" diameter SDR 11 HDPE pipe exceeds manufacturer's recommendations for ring thrust stress, ring deflection and wall buckling at the assumed maximum waste depth. Additional documentation will be provided if the maximum anticipated waste depth is exceeded in future development areas.

(3) The leachate collection system will be designed to maintain less than a 12 inch depth of leachate on the liner. Leachate head measuring piezometers have been installed near the low point of the existing Subtitle D composite lined areas. Leachate head piezometers will also be installed near the low points of future disposal areas as needed to monitor leachate head on the liner.

Documentation supporting the design of the Conceptual Development Area being able to maintain less than a 12 inch depth of leachate on the liner was included in the additional information submitted to IDNR on December 16, 2021 (Doc #101889) to supplement the 2021 Permit Renewal Documentation. The information was approved by IDNR as per Special Provision X.2.b.4)

(4) Leachate recirculation is allowed in the Subtitle D composite lined disposal areas as per Special Provision X.5 of the SDP Permit. It is assumed that leachate recirculation will be conducted in all future disposal areas with Subtitle D composite liners once adequate solid waste is placed in these areas to allow for the efficient recirculation of leachate.

(5) Existing leachate collection piping in the Subtitle D composite lined areas is 8 inch diameter. The leachate collection pipe installed in future expansion areas will have a minimum diameter of 8 inches. Long radius bends and sweeps will be used at alignment changes as necessary to maintain access to the piping. Access to the leachate collection piping is available at cleanouts, in manholes (located outside of the waste boundary), and at sidewall access points.

(6) The combination of the 8 inch (minimum) diameter leachate collection pipe, the clean rock backfill in the leachate collection pipe trench, and the drainage layer material will minimize the potential for clogging of the leachate

collection system due to mass loading. Clogging due to mass loading is typically minimized if the drainage layer and rock backfill around the leachate pipe are not saturated for long periods of time and if low saturated leachate heights are maintained. The leachate collection system is designed to limit levels to less than 12" above the top of liner elevation to maintain low leachate levels. The use of large diameter, relatively uniform gravel as the pipe bedding also minimizes the potential for biological clogging in the leachate collection system.

(7) The drainage layer will consist of a minimum of 12 inches of a high hydraulic conductivity material with a hydraulic conductivity of $1x10^{-2}$ cm/sec or more. Clean sand will be used for the drainage layer, the sand will meet the hydraulic conductivity specified above and have less than 5% by weight passing a #200 sieve. Drainage layer material will have hydraulic conductivity and gradation verified in the laboratory before use is allowed. A copy of the laboratory hydraulic conductivity and gradation test(s) will be submitted to IDNR in the final QC&A Report for each new disposal area.

(8) No manholes are proposed to be placed on the liner.

(9) It is not anticipated that the leachate drainage and collection system will be used for long term leachate storage. There may be occasions when repairs or maintenance are required on the leachate collection system that will require leachate to be temporarily stored within the lined area of the landfill.

(10) Leachate conveyance, storage, and management structures outside of the solid waste boundary shall have containment structures or countermeasures to meet this requirement. Dual walled piping, AquaBlok sealing composite, and bentonite/sand backfill have been utilized to meet this requirement to date and will continue to be utilized in the future.

(11) Leachate is collected by three methods at the South Central Iowa Sanitary Landfill: in leachate piping installed as a part of the Subtitle D composite developments, in two leachate laterals installed in the previously closed unlined landfilling area, and in five (5) leachate extraction wells in previously closed unlined landfilling areas. A seepage collection pipe was also installed under the Subtitle D composite liner in Cells 1 and 2 at the toe of the unlined landfilling area to collect leachate that may seep from the slope (under the liner). The locations of the various leachate collection/conveyance elements are shown on the figures in Appendix 1 of this Section. Note that the leachate collected from the different areas is not metered separately.

Leachate collection piping will be installed in all future Subtitle D composite lined disposal areas. The leachate collection piping installed in future expansion areas will consist of perforated HDPE piping with a minimum diameter of 8 inches installed in clean, highly permeable river rock backfill with a clean sand drainage layer.

The proposed locations of leachate collection infrastructure in future development areas are included on the figures in Appendix 1 of this Section.

All leachate collected from the current disposal areas is conveyed to one of two Subtitle D composite lined leachate storage lagoons on site.

- Leachate from Subtitle D composite lined developments Cell 1, Cell 2, Cell 3, Cell 4, Cell 5; from the two (2) leachate laterals installed in the previously closed unlined landfilling area; from the six (6) leachate extraction wells; and from the seepage collection pipe under the Subtitle D composite liner in Cells 1 and 2 is conveyed to the west leachate storage lagoon which has a capacity of approximately 651,120 gallons.
- Leachate from Subtitle D composite lined development Phase 1, Cell A&B Expansion is conveyed to the east leachate storage lagoon which has a capacity of approximately 1,005,700 gallons. Leachate from the remainder of the Conceptual Development Area will be conveyed to this lagoon as well.

Accumulated leachate is either recirculated on site in accordance with Special Provision X.5 of the SDP Permit or hauled to the Des Moines Metropolitan Water Reclamation Facility (WRF). A treatment agreement with the WRF is included in Appendix 4 of this Section.

Seven day leachate storage requirements resulting from the construction of the Cell 5 expansion area were discussed in the Leachate Storage Lagoon documentation dated October 11, 2013 (Doc #78272) and approved by IDNR in Permit Amendment #6 dated October 15, 2013. Leachate generation calculations for the initial disposal areas in the Conceptual Development Area (CDA) were included in the 2021 Municipal Solid Waste Permit Renewal documentation dated January 13, 2021 (Doc #99511) and approved by IDNR in Permit Revision #1 dated March 3, 2023. The leachate generation calculations previously submitted and approved are still valid. Data on leachate collection volumes will continue to be gathered during future site development and leachate collection volumes will be revisited at least annually (in the Annual Water Quality Report). Note that a reinforced landfill cover or protective soil cover may be utilized over the drainage layer

material to limit leachate production from newly constructed disposal areas. The anticipated leachate generation volume will be updated and submitted to IDNR for review prior to the construction of any additional disposal areas beyond the initial two phases in the CDA.

.

(12) The leachate collection system is equipped with valves to allow for the control of leachate flows during site repairs, maintenance, or emergency conditions. Future expansions of the leachate collection system will also include valves.

(13) All weather access to the various components of the leachate collection system will be maintained.

(14) A Leachate Control System Performance Evaluation Report will be provided in the Annual Water Quality Report.

113.7(6) Quality Control and Assurance Programs

A general Quality Control and Assurance (QC&A) Plan is included in Appendix 3 of this Section. The QC&A Plan outlines the steps that will be taken to conform to the provisions of subrule 113.7(6). A QC&A Plan will be submitted with the plans and specifications for each new waste disposal area for IDNR review.

113.7(7) Vertical and Horizontal Expansions of MSWLF Units

The current design does not include any additional disposal capacity over existing unlined MSWLF units.

113.7(8) Run-on and Runoff Control Systems

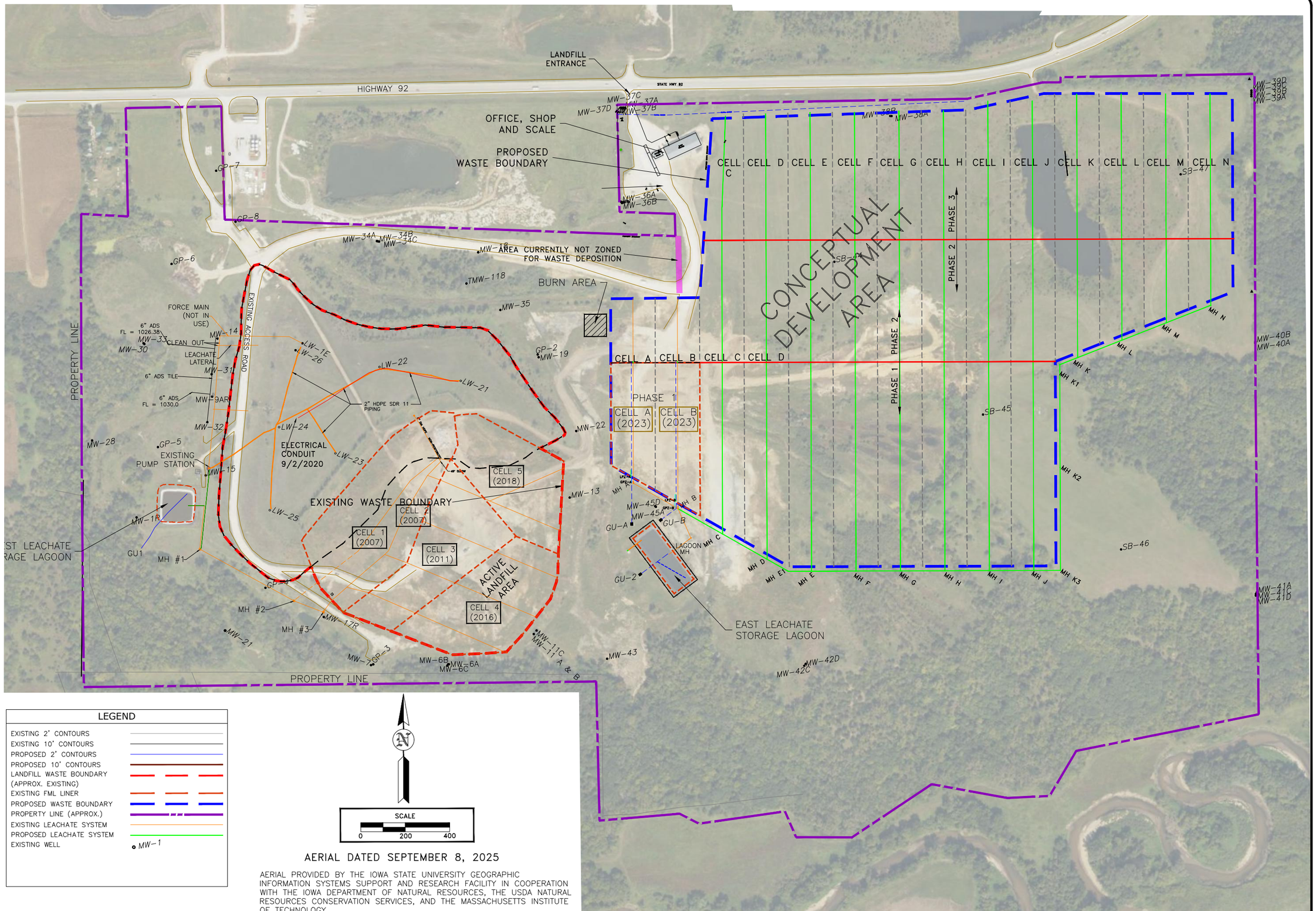
a) A run-on control system will be utilized to prevent flow onto the active portion of the landfill. The run-on control system will be designed to prevent flow onto the active portion of the landfill during the peak discharge from a 24-hour, 25-year storm. A runoff control system will be utilized to collect and control runoff. The runoff control system will be designed to collect and control at least the water volume resulting from a 24-hour, 25-year storm. Run-on and runoff control systems will consist of berms, diversions, terraces, culverts, drop pipes, sediment basins, and other best management practices to control surface water at the site.

b) Any runoff that comes into contact with solid waste at the active portion of the MSWLF will be contained and treated as leachate. Berms and diversions will be utilized to control run-on and runoff at the active portion of the landfill.

APPENDIX 1

Figure List

1 Overall Site View
2 Site Plan
3 Base Liner Construction
4 Groundwater and Leachate Head Monitoring Points
5 Typical Pipe Cross Section - Landfill Base
6 Typical Pipe Cross Section - Landfill Sideslope
7 Sidewall Access Point
8 Intermediate Contours Plan - South Half Development Area
9 Final Contours Plan
10 Closed Areas
11 Final Cover Detail - Composite Cap
12 Gas Vent Detail
13 Typical Terrace Cross Section



LEGEND

- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- PROPOSED 2' CONTOURS
- PROPOSED 10' CONTOURS
- LANDFILL WASTE BOUNDARY (APPROX. EXISTING)
- EXISTING FML LINER
- PROPOSED WASTE BOUNDARY
- PROPERTY LINE (APPROX.)
- EXISTING LEACHATE SYSTEM
- PROPOSED LEACHATE SYSTEM
- EXISTING WELL — MW-1

SCALE
0 200 400

AERIAL DATED SEPTEMBER 8, 2025

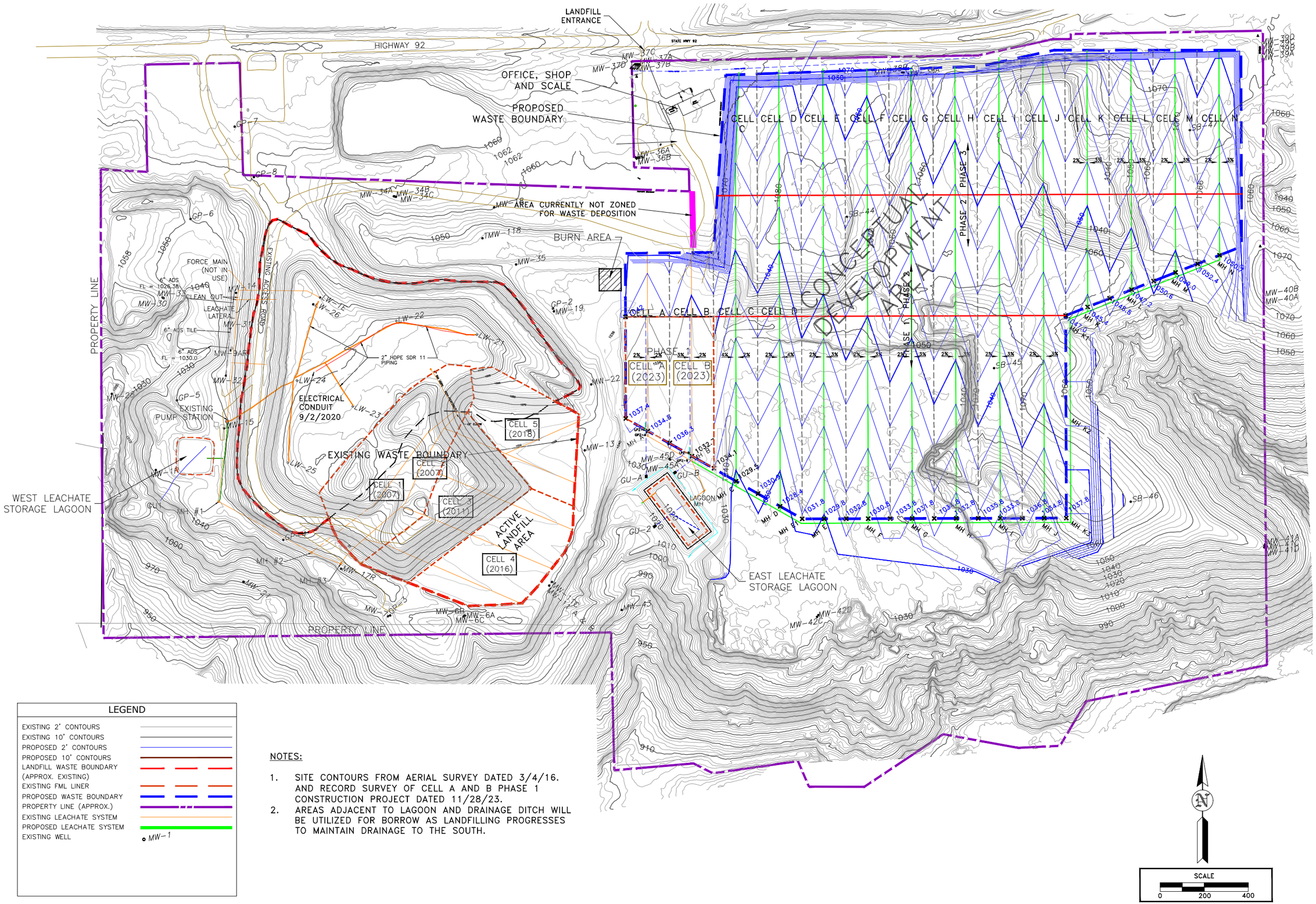
AERIAL PROVIDED BY THE IOWA STATE UNIVERSITY GEOGRAPHIC INFORMATION SYSTEMS SUPPORT AND RESEARCH FACILITY IN COOPERATION WITH THE IOWA DEPARTMENT OF NATURAL RESOURCES, THE USDA NATURAL RESOURCES CONSERVATION SERVICES, AND THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

OVERALL SITE VIEW
2026 PERMIT RENEWAL
SOUTH CENTRAL IOWA SANITARY LANDFILL
WINTERSET, IOWA

FIGURE:	1	
REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26

HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146

HLW Engineering Group



LEGEND	
EXISTING 2' CONTOURS	
EXISTING 10' CONTOURS	
PROPOSED 2' CONTOURS	
PROPOSED 10' CONTOURS	
LANDFILL WASTE BOUNDARY (APPROX. EXISTING)	
EXISTING FML LINER	
PROPOSED WASTE BOUNDARY	
PROPERTY LINE (APPROX.)	
EXISTING LEACHATE SYSTEM	
PROPOSED LEACHATE SYSTEM	
EXISTING WELL	MW-1

NOTES:

1. SITE CONTOURS FROM AERIAL SURVEY DATED 3/4/16. AND RECORD SURVEY OF CELL A AND B PHASE 1 CONSTRUCTION PROJECT DATED 11/28/23.
2. AREAS ADJACENT TO LAGOON AND DRAINAGE DITCH WILL BE UTILIZED FOR BORROW AS LANDFILLING PROGRESSES TO MAINTAIN DRAINAGE TO THE SOUTH.

SCALE
0 200 400

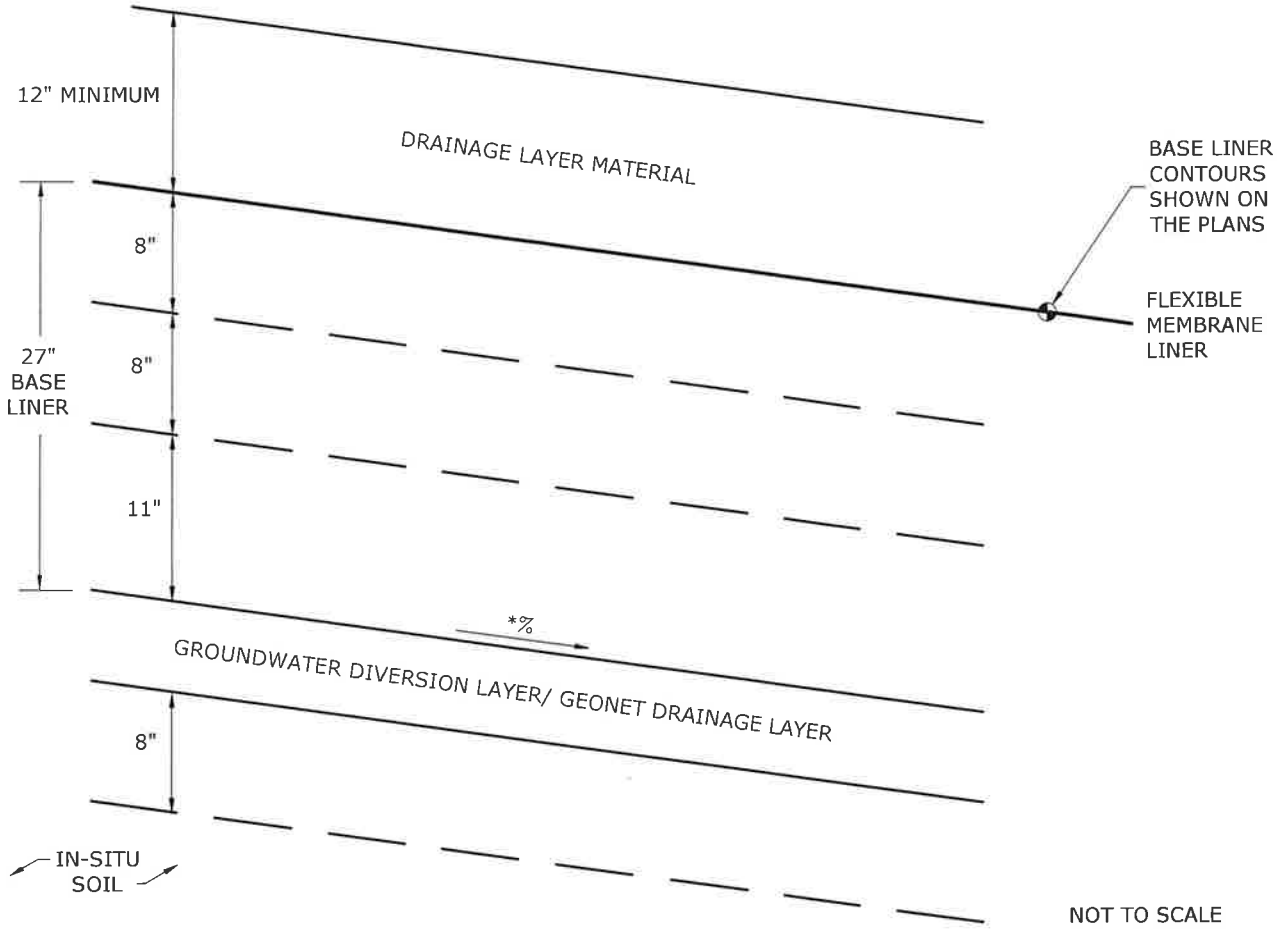
SITE PLAN
2026 PERMIT RENEWAL
SOUTH CENTRAL IOWA SANITARY LANDFILL
WINTERSET, IOWA

FIGURE: 2

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26

HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146

HLW Engineering Group



BASE LINER CONSTRUCTION AND MATERIAL NOTES:

- The top 8" of subgrade shall be scarified and recompacted to a minimum of 95% Standard Proctor (ASTM D698) or proof rolled.
- The base liner shall be constructed in accordance with Iowa Administrative Code 567, Subrule 113.7(5)"A".
- The base liner soil shall have a lab tested hydraulic conductivity ≤ 1 x 10E−7 cm/sec, the Engineer shall determine the suitability of the soil for use as the base liner material based on the results of lab hydraulic conductivity tests performed by the Engineer.
- The base liner shall be constructed in 2 – 8 inch compacted lifts and 1 – 11" compacted lift to a total depth of 2.25 feet (27 inches). The base liner material shall be placed with moisture and density control. Unless specified otherwise in the plans and specifications, the soil shall be compacted to a minimum of 95% standard proctor density (ASTM D698) with moisture 0−5% above optimum.
- The bottom lift shall be placed in a single 11 inch (compacted depth) lift to meet designed base liner thickness. The entire lift shall meet the compaction and moisture requirements for base liner construction.
- The Engineer shall test for density and moisture (as per the specifications), certify and pass each 8 inch lift prior to placement of the next lift. Tests are required at the rate of five per lift per acre of base liner.
- A minimum of 5 Shelby Tube tests shall be taken from the base liner. Test results meeting or exceeding the IDNR minimum hydraulic conductivity requirement (≤ 1x10E−7 cm/sec) must be obtained before FML installation can begin.
- The flexible membrane liner shall be placed in direct and uniform contact with the base liner. For details of flexible membrane liner see specifications.
- The drainage layer material shall be placed in a single lift after installation of the flexible membrane liner.
- The drainage layer material shall have a field and/or lab tested hydraulic conductivity ≥ 1 x 10E−2 cm/sec. The drainage layer material shall be inert, natural sands and gravels (ie. non−reactive when in contact with landfill leachate).
- Leachate collection pipes, groundwater diversion pipes, etc., shall be placed as shown on the details, plans, and specifications.

HLW Engineering Group

BASE LINER CONSTRUCTION
2026 PERMIT RENEWAL

SCILA SANITARY LANDFILL
WINTERSET, IOWA

FIGURE: 3

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022−23A	DATE 2/18/26

HLW Engineering Group

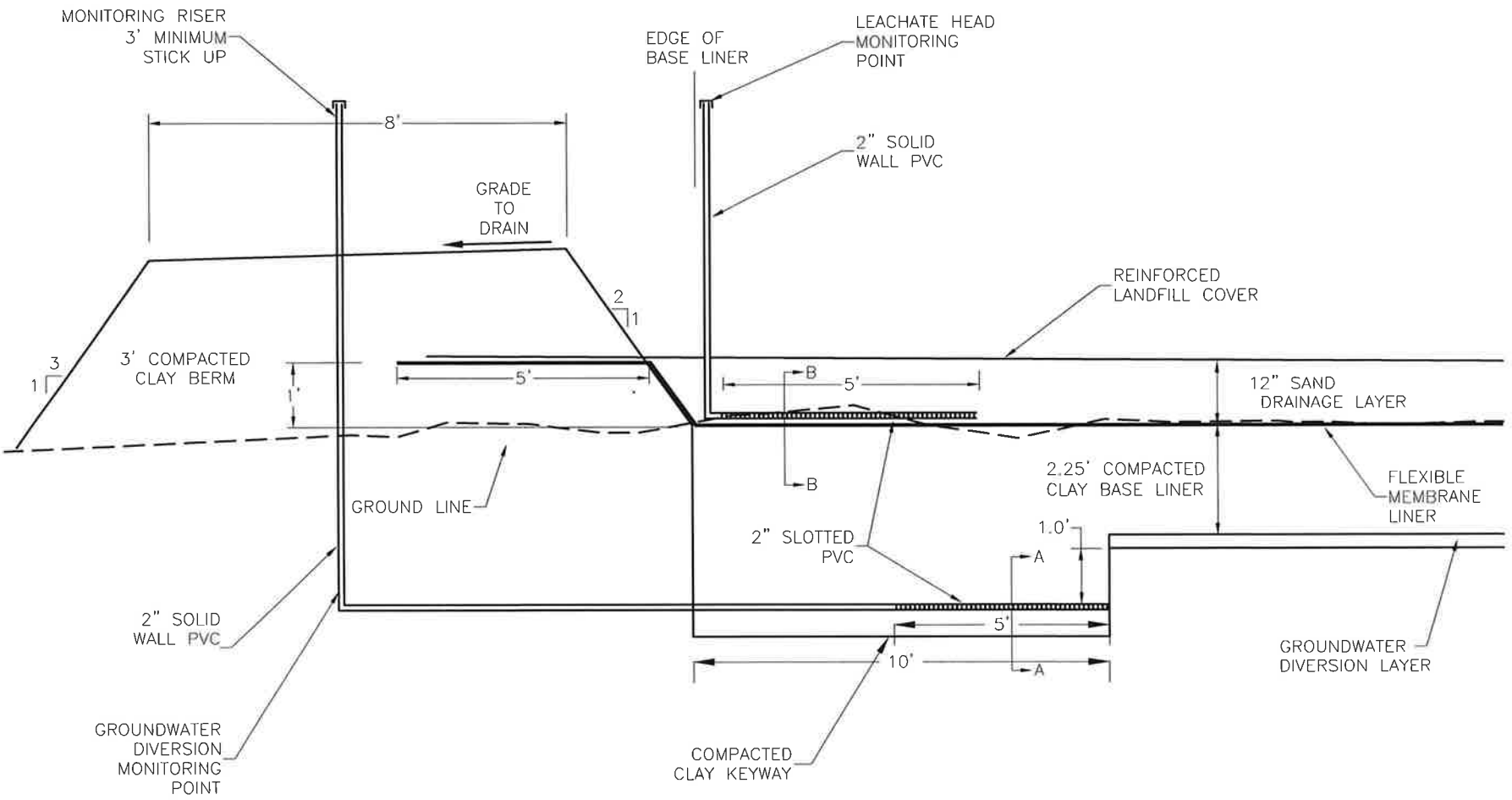
GROUNDWATER AND LEACHATE HEAD MONITORING POINTS
2026 PERMIT RENEWAL

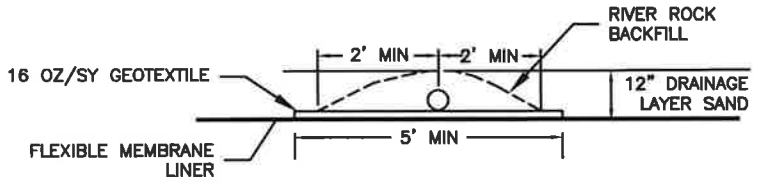
SCILA SANITARY LANDFILL
WINTERSET, IOWA

FIGURE: 4

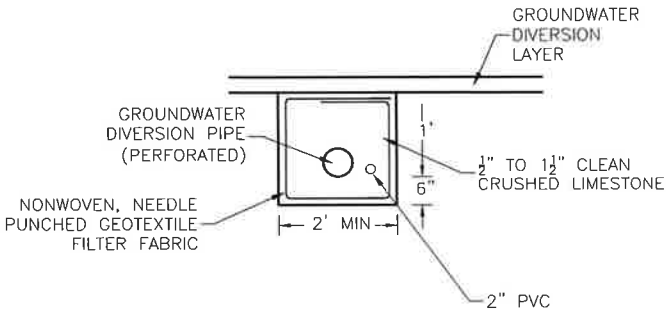
REVISION	NO.	DATE

DRAWN	PROJECT NO.	DATE
JGH	6022-23A	2/18/26





SECTION B–B



SECTION A–A

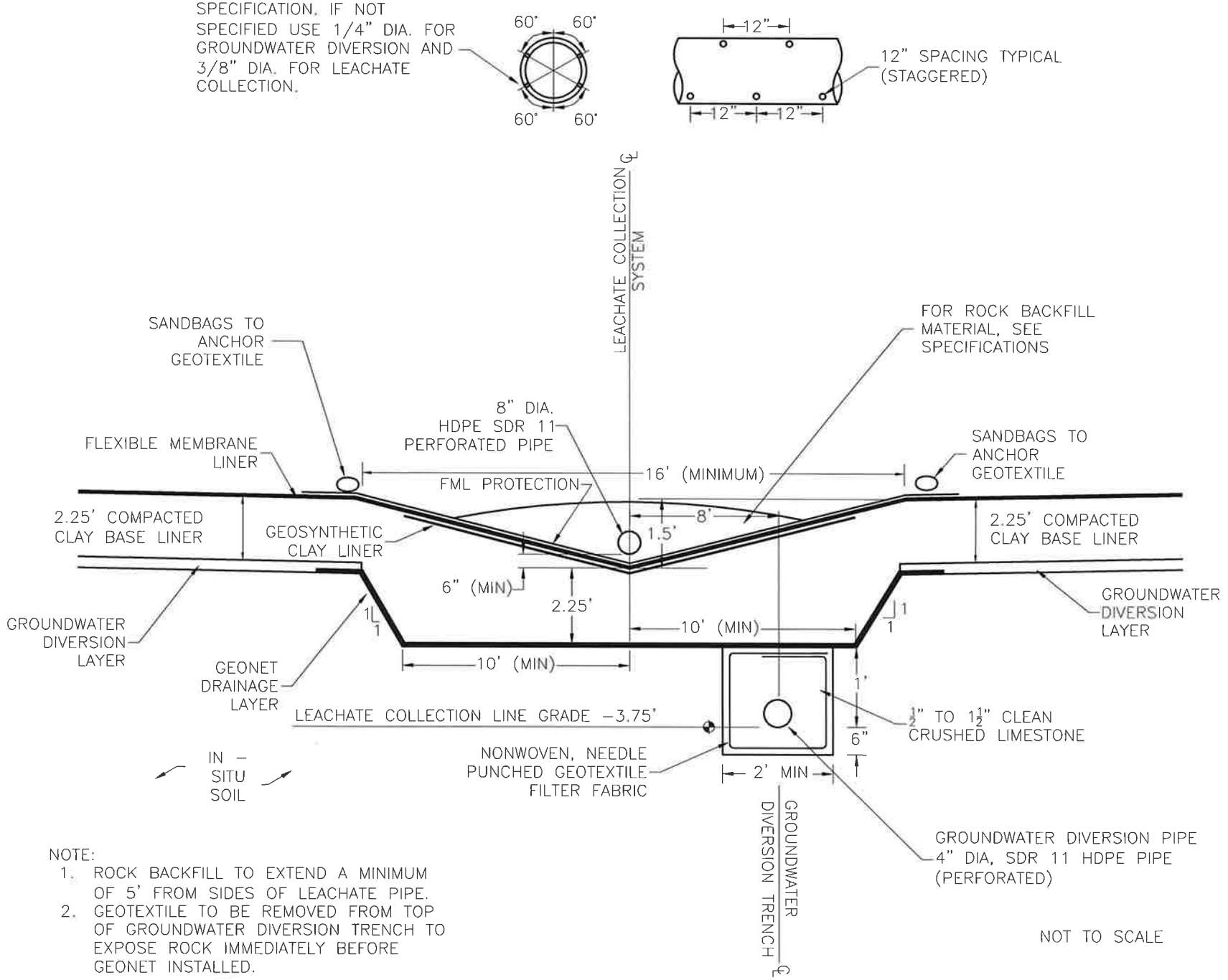
HLW Engineering Group

TYPICAL PIPE CROSS SECTION

LANDFILL BASE
2026 PERMIT RENEWAL
SCILA SANITARY LANDFILL
WINTERSET, IOWA

FIGURE: 5

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26

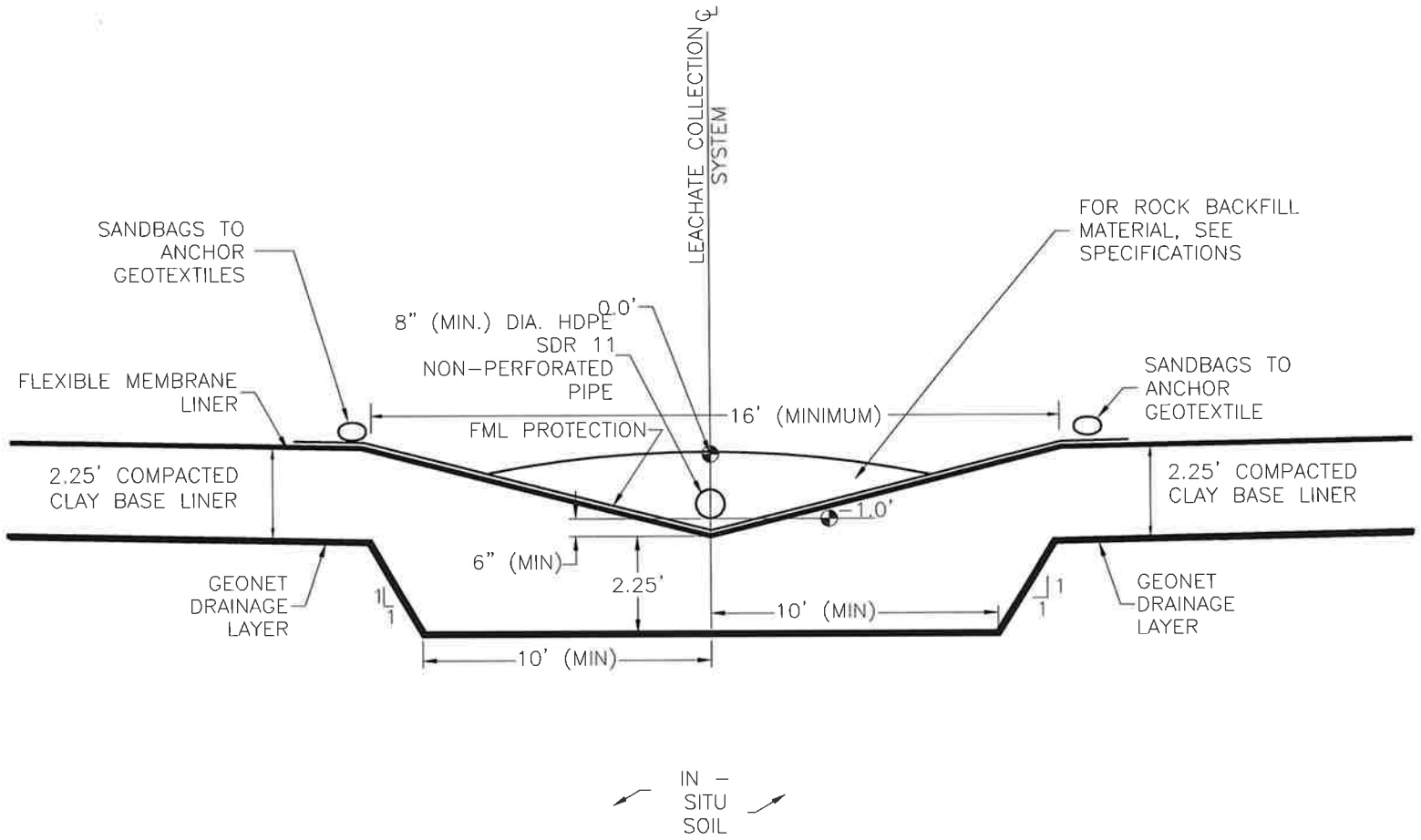


NOTE:
1. ROCK BACKFILL TO EXTEND A MINIMUM OF 5' FROM SIDES OF LEACHATE PIPE.
2. GEOTEXTILE TO BE REMOVED FROM TOP OF GROUNDWATER DIVERSION TRENCH TO EXPOSE ROCK IMMEDIATELY BEFORE GEONET INSTALLED.

HLW Engineering Group

TYPICAL PIPE CROSS SECTION
LANDFILL SIDESLOPE
2026 PERMIT RENEWAL

SCILA SANITARY LANDFILL
WINTERSET, IOWA



NOTE:
1. ROCK BACKFILL TO EXTEND A MINIMUM OF 5' FROM SIDES OF LEACHATE PIPE.

NOT TO SCALE

FIGURE: 6

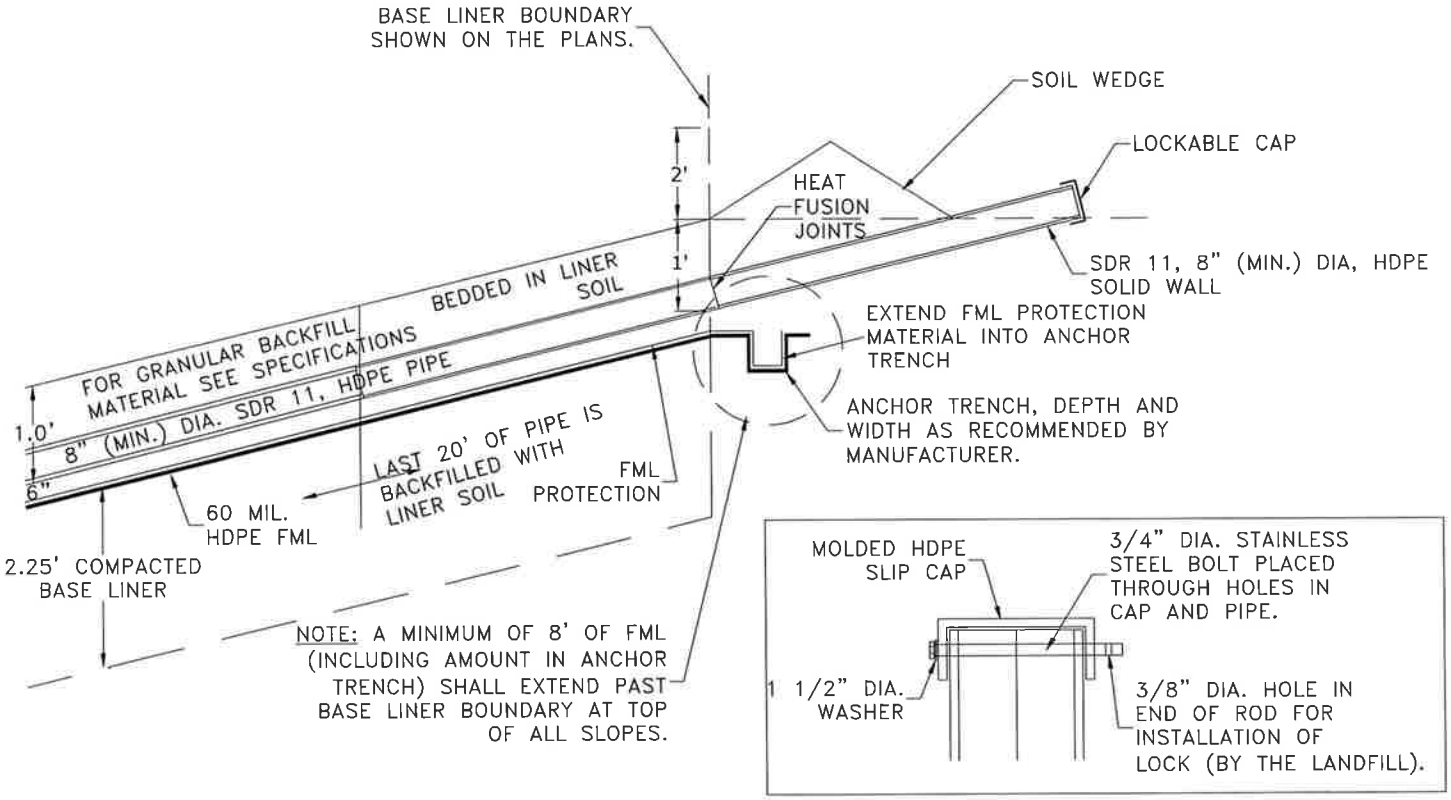
REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26

HLW Engineering Group

SIDEWALL ACCESS POINT

2026 PERMIT RENEWAL

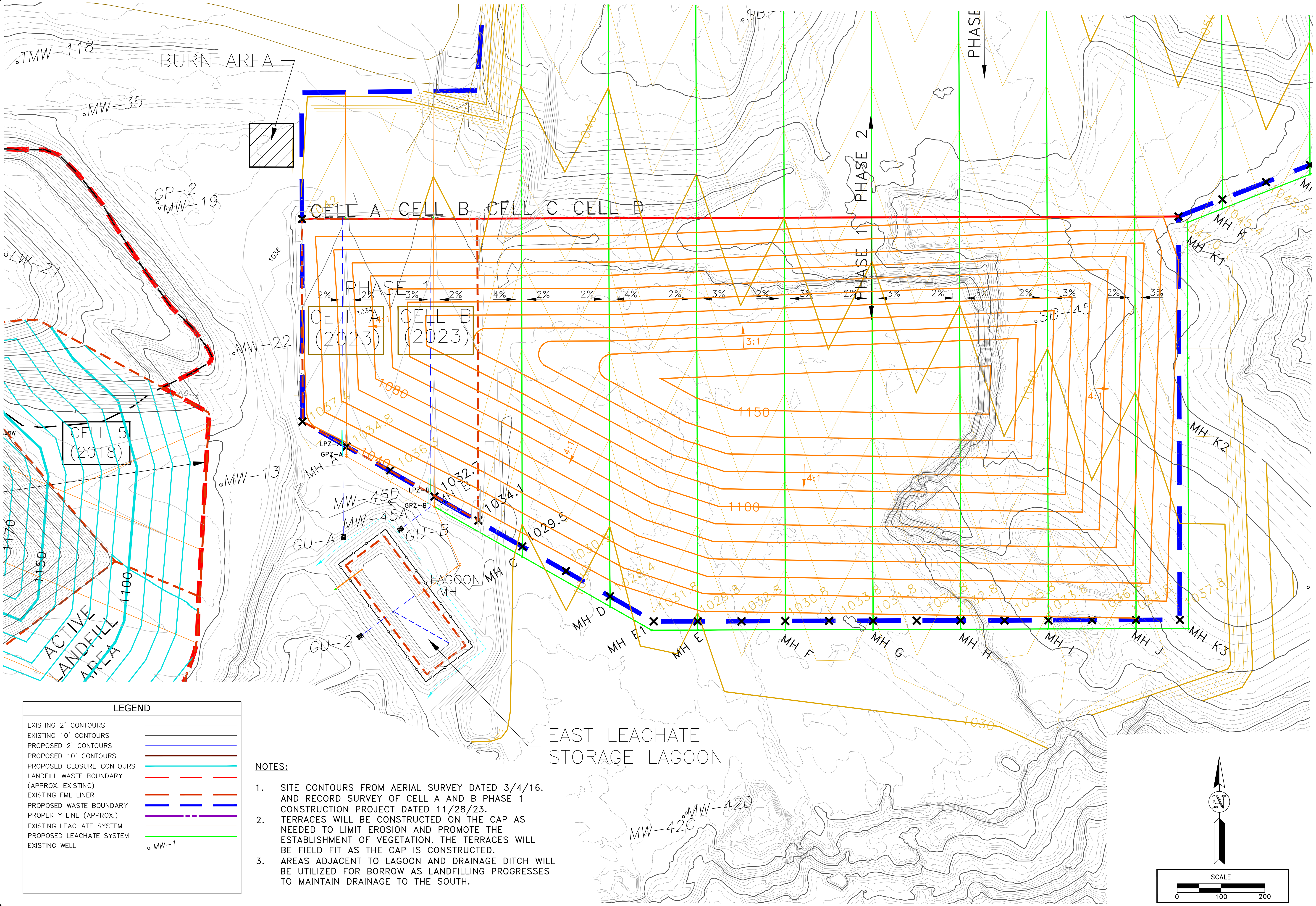
SCILA SANITARY LANDFILL
WINTERSET, IOWA



NOT TO SCALE

FIGURE: 7

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26



LEGEND

EXISTING 2' CONTOURS	
EXISTING 10' CONTOURS	
PROPOSED 2' CONTOURS	
PROPOSED 10' CONTOURS	
PROPOSED CLOSURE CONTOURS	
LANDFILL WASTE BOUNDARY (APPROX. EXISTING)	
EXISTING FML LINER	
PROPOSED WASTE BOUNDARY	
PROPERTY LINE (APPROX.)	
EXISTING LEACHATE SYSTEM	
PROPOSED LEACHATE SYSTEM	
EXISTING WELL	∘ MW-1

NOTES:

1. SITE CONTOURS FROM AERIAL SURVEY DATED 3/4/16. AND RECORD SURVEY OF CELL A AND B PHASE 1 CONSTRUCTION PROJECT DATED 11/28/23.
2. TERRACES WILL BE CONSTRUCTED ON THE CAP AS NEEDED TO LIMIT EROSION AND PROMOTE THE ESTABLISHMENT OF VEGETATION. THE TERRACES WILL BE FIELD FIT AS THE CAP IS CONSTRUCTED.
3. AREAS ADJACENT TO LAGOON AND DRAINAGE DITCH WILL BE UTILIZED FOR BORROW AS LANDFILLING PROGRESSES TO MAINTAIN DRAINAGE TO THE SOUTH.

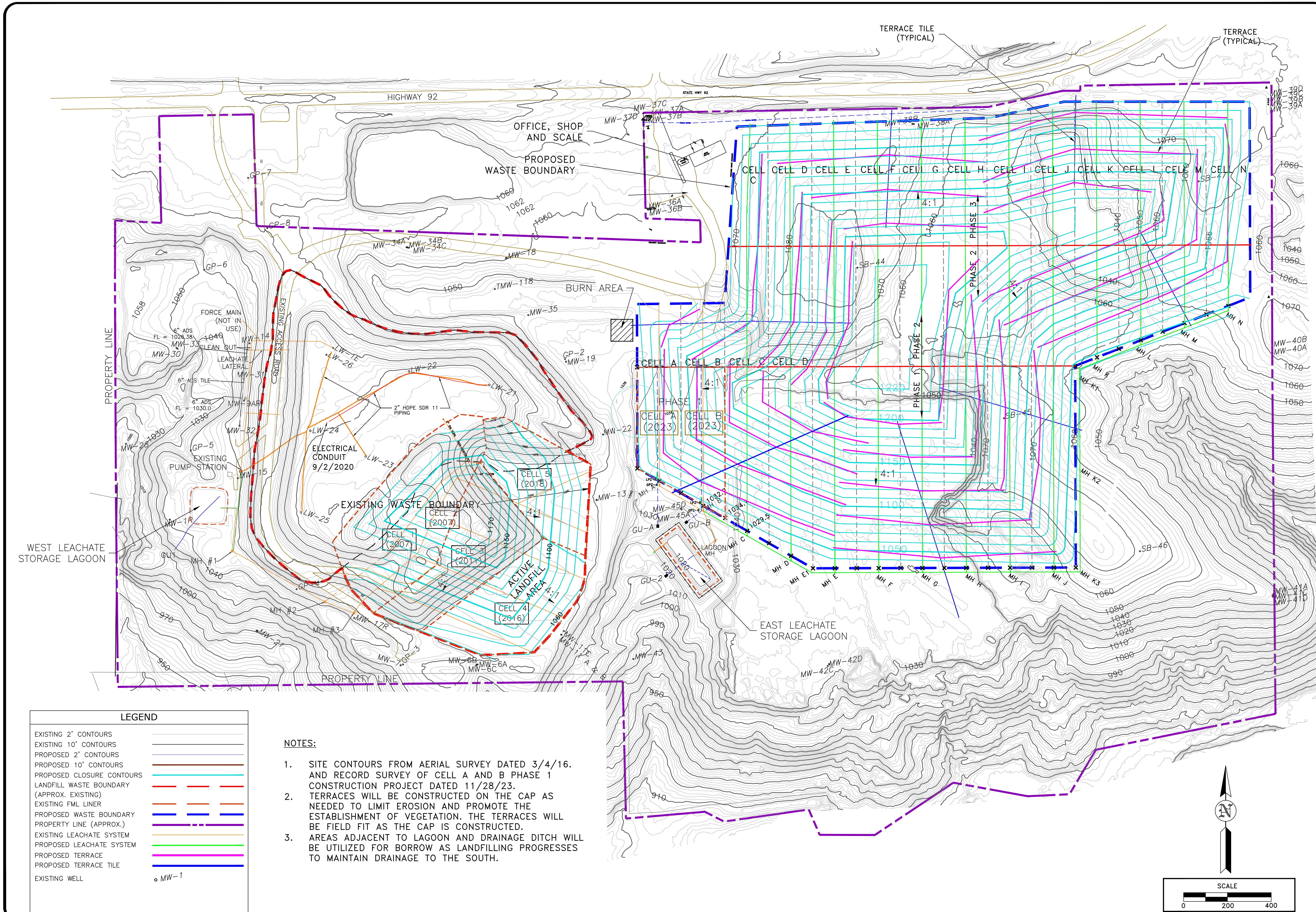
FIGURE: 8

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26

INTERMEDIATE CONTOURS PLAN
SOUTH HALF DEVELOPMENT AREA
2026 PERMIT RENEWAL
SOUTH CENTRAL IOWA SANITARY LANDFILL
WINTERSET, IOWA

HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146

HLW Engineering Group


HIGHWAY 92
STATE HWY 92
OFFICE, SHOP AND SCALE
PROPOSED WASTE BOUNDARY
TERRACE TILE (TYPICAL)
TERRACE (TYPICAL)
BURN AREA
PROPERTY LINE
FORCE MAIN (NOT IN USE)
6" ADS
CLEAN OUT
LEACHATE LATERAL
6" ADS TILE
EXISTING ACCESS ROAD
2" HDPE SDR 11 PIPING
ELECTRICAL CONDUIT 9/2/2020
EXISTING PUMP STATION
WEST LEACHATE STORAGE LAGOON
EXISTING WASTE BOUNDARY
ACTIVE LANDFILL AREA
CELL 5 (2018)
CELL 3 (2011)
CELL 4 (2016)
CELL (2007)
CELL A (2023)
CELL B (2023)
CELL A CELL B CELL C CELL D
CELL C CELL D CELL E CELL F CELL G CELL H CELL I CELL J CELL K CELL L CELL M CELL N
PHASE 1
PHASE 2
PHASE 3
4:1
LAGOON MH
EAST LEACHATE STORAGE LAGOON
MH D
MH E
MH F
MH G
MH H
MH I
MH J
MH K
MH L
MH M
MH N
MH K1
MH K2
MH K3
SB-44
SB-45
SB-46
GU-A
GU-B
GU-2
MW-13
MW-18
MW-19
MW-22
MW-35
TMW-118
MW-42C
MW-42D
MW-43
SCALE
0 200 400
N

LEGEND

EXISTING 2' CONTOURS	
EXISTING 10' CONTOURS	
PROPOSED 2' CONTOURS	
PROPOSED 10' CONTOURS	
PROPOSED CLOSURE CONTOURS	
LANDFILL WASTE BOUNDARY (APPROX. EXISTING)	
EXISTING FML LINER	
PROPOSED WASTE BOUNDARY	
PROPERTY LINE (APPROX.)	
EXISTING LEACHATE SYSTEM	
PROPOSED LEACHATE SYSTEM	
PROPOSED TERRACE	
PROPOSED TERRACE TILE	
EXISTING WELL	MW-1

NOTES:

1. SITE CONTOURS FROM AERIAL SURVEY DATED 3/4/16. AND RECORD SURVEY OF CELL A AND B PHASE 1 CONSTRUCTION PROJECT DATED 11/28/23.
2. TERRACES WILL BE CONSTRUCTED ON THE CAP AS NEEDED TO LIMIT EROSION AND PROMOTE THE ESTABLISHMENT OF VEGETATION. THE TERRACES WILL BE FIELD FIT AS THE CAP IS CONSTRUCTED.
3. AREAS ADJACENT TO LAGOON AND DRAINAGE DITCH WILL BE UTILIZED FOR BORROW AS LANDFILLING PROGRESSES TO MAINTAIN DRAINAGE TO THE SOUTH.

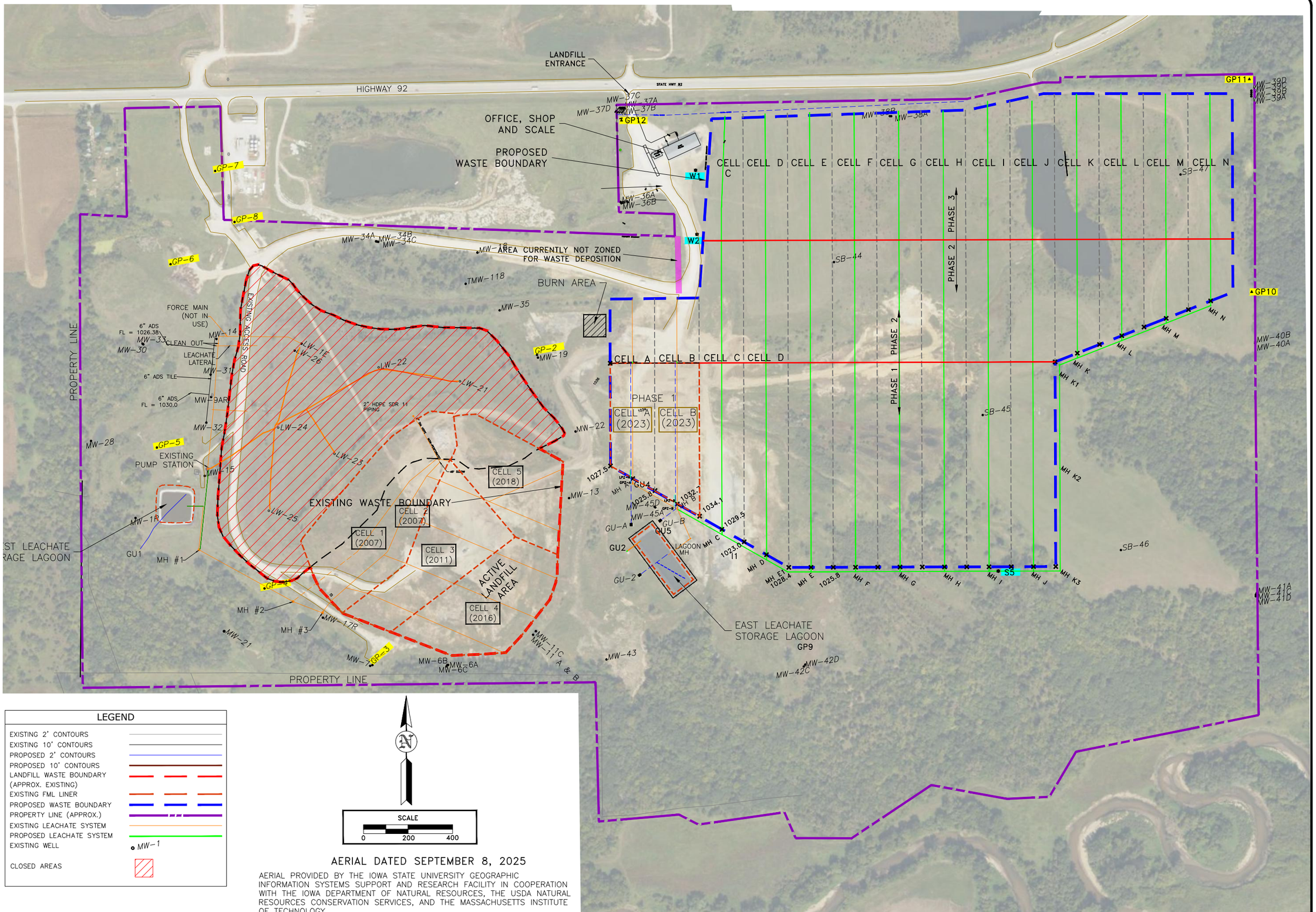
FIGURE: 9

FINAL CONTOURS PLAN
2026 PERMIT RENEWAL

SOUTH CENTRAL IOWA SANITARY LANDFILL
WINTERSET, IOWA

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26

HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146



LEGEND

- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- PROPOSED 2' CONTOURS
- PROPOSED 10' CONTOURS
- LANDFILL WASTE BOUNDARY (APPROX. EXISTING)
- EXISTING FML LINER
- PROPOSED WASTE BOUNDARY
- PROPERTY LINE (APPROX.)
- EXISTING LEACHATE SYSTEM
- PROPOSED LEACHATE SYSTEM
- EXISTING WELL (MW-1)
- CLOSED AREAS

SCALE
0 200 400

AERIAL DATED SEPTEMBER 8, 2025

AERIAL PROVIDED BY THE IOWA STATE UNIVERSITY GEOGRAPHIC INFORMATION SYSTEMS SUPPORT AND RESEARCH FACILITY IN COOPERATION WITH THE IOWA DEPARTMENT OF NATURAL RESOURCES, THE USDA NATURAL RESOURCES CONSERVATION SERVICES, AND THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

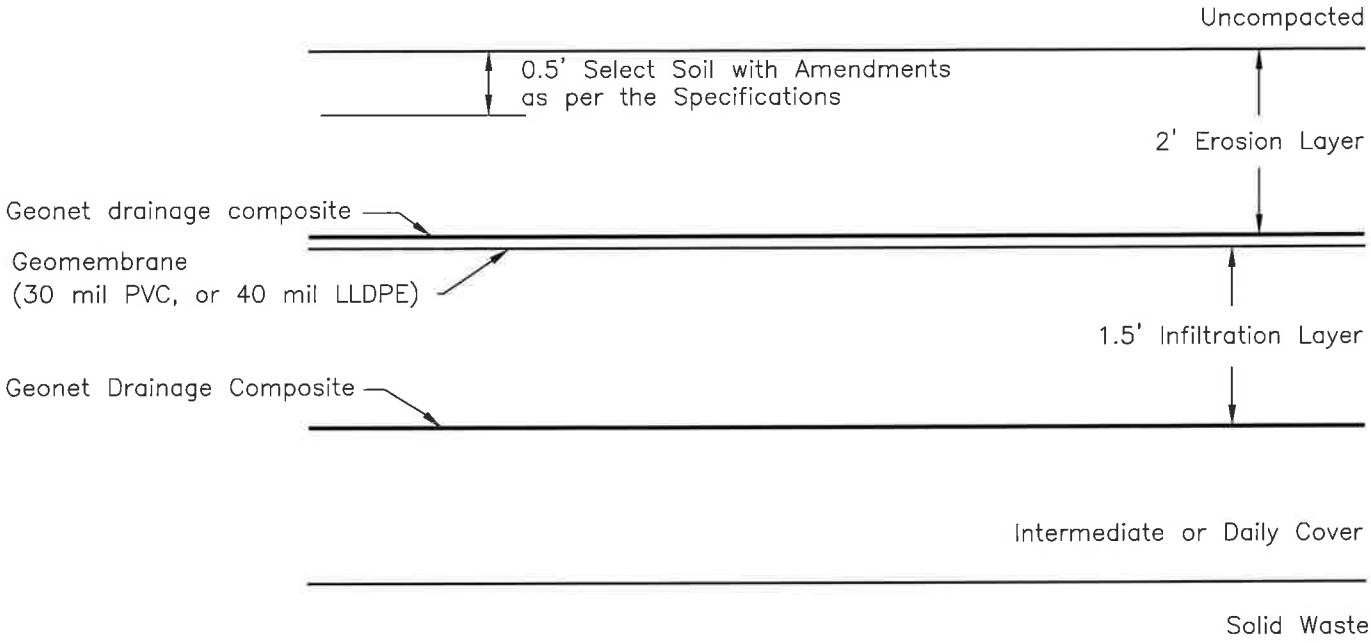
FIGURE: 10

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26

CLOSED AREAS
2026 PERMIT RENEWAL
SOUTH CENTRAL IOWA SANITARY LANDFILL
WINTERSET, IOWA

HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146

HLW Engineering Group



CONSTRUCTION AND MATERIAL NOTES:

- The Engineer shall determine the suitability of soil for use in the infiltration layer based on the results of lab hydraulic conductivity tests.
- The lower geonet composite will serve as the gas control layer. Gas control layer shall be vented as shown in Figure 12.
- The select soil shall be from the best available soil for vegetative growth from borrow areas or stockpiles. Soil amendments shall be applied as per the specifications. The layer should be disked and prepared for seeding and mulching as required in the specifications.
- The upper geonet drainage composite will outlet into drainage piping on the slope and at the toe of the slope.

NOT TO SCALE

HLW Engineering Group

FINAL COVER DETAIL

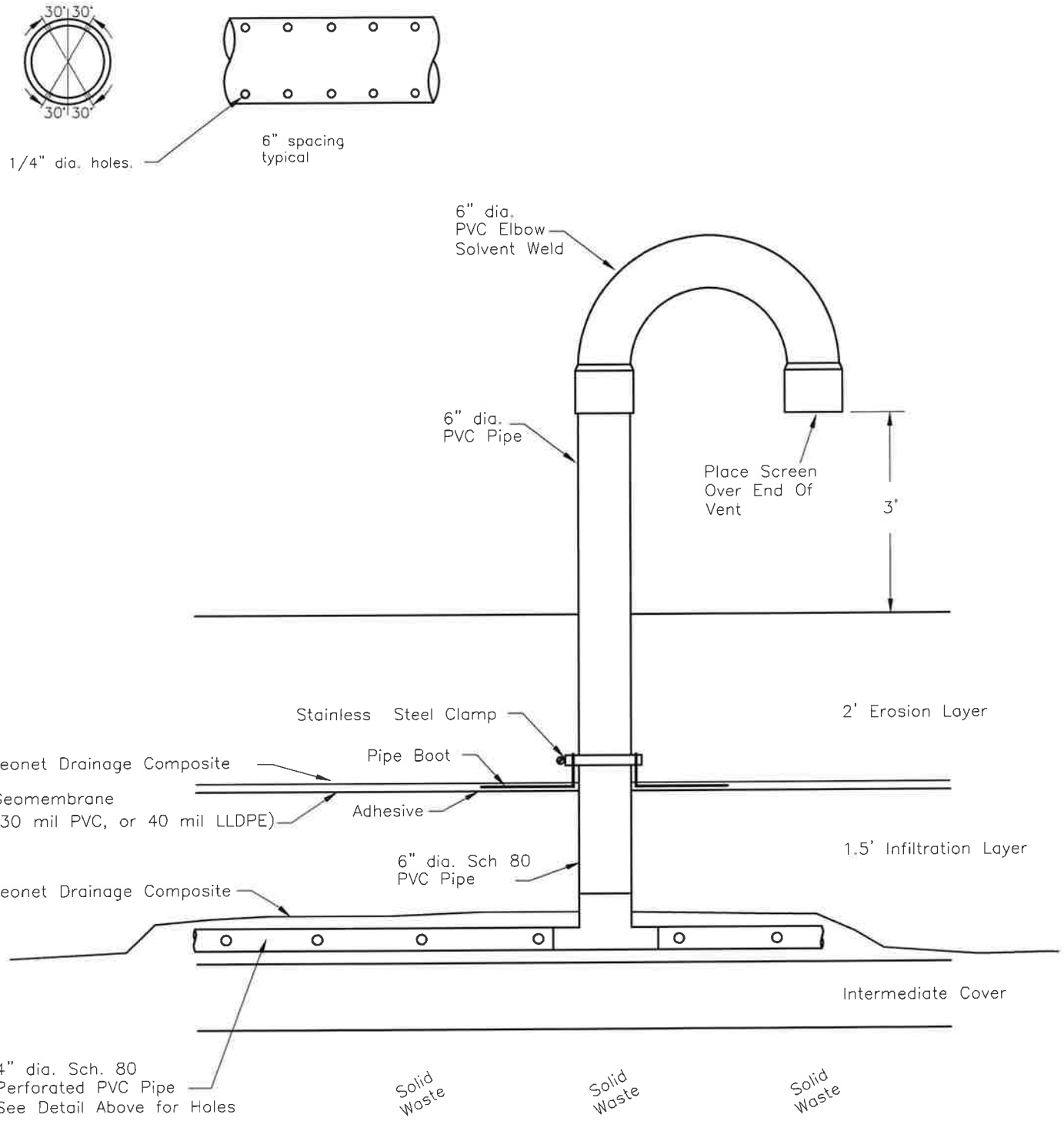
COMPOSITE CAP

2026 PERMIT RENEWAL

SCILA SANITARY LANDFILL
WINTERSET, IOWA

FIGURE: 11

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26



NOT TO SCALE

HLW Engineering Group

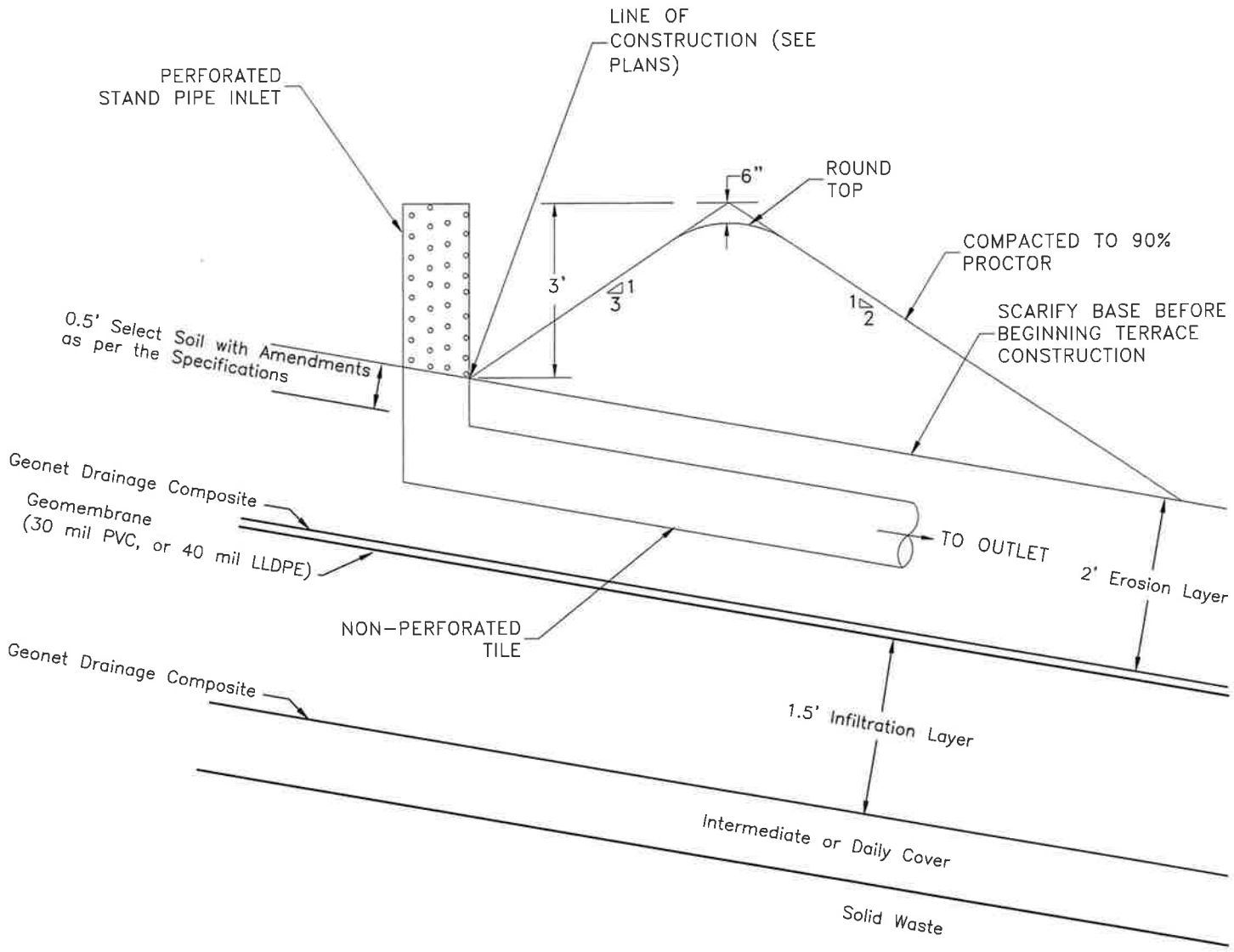
GAS VENT DETAIL

2026 PERMIT RENEWAL

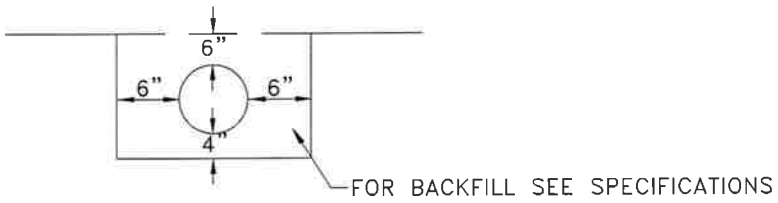
SCILA SANITARY LANDFILL
WINTERSET, IOWA

FIGURE: 12

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26



Notes:
1. Rock channels may be used instead of intakes and tiles.



PIPE BEDDING DETAIL
NO SCALE

HLW Engineering Group

TYPICAL TERRACE CROSS SECTION
2026 PERMIT RENEWAL

SCILA SANITARY LANDFILL
WINTERSET, IOWA

FIGURE: 13

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6022-23A	DATE 2/18/26

APPENDIX 2

POST IN CONSPICUOUS PLACE

NONTRANSFERABLE

STATE OF IOWA

DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

DES MOINES

SCALE LICENSE

License No. 3

SOUTH CENTRAL IOWA LANDFILL
2520 STATE HIGHWAY 92
WINTERSET IA 50273

SCALE LOCATION

SOUTH CENTRAL IOWA LANDFILL
2520 STATE HIGHWAY 92
WINTERSET IA 50273

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 12/5/2025

EXPIRATION DATE 12/31/2026

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	1
OVER 120000 LBS	0
MOISTURE METERS	0
COUNTY	61

APPENDIX 3

Quality Control and Assurance Plan

QC&A Officer: Douglas J. Luzbetak, P.E.
HLW Engineering Group, LLC
204 West Broad Street
PO Box 314
Story City, Iowa 50248
(515)733-4144
FAX: (515)733-4146
Cell: (515)290-0247
dluzbetak@hlwengineering.com

Resident Project Representative (RPR):
To be determined at the time of construction

The quality control and assurance requirements will be as specified below. Specific details for the construction of individual disposal or closure areas will be submitted to IDNR along with the plans and specifications for each project prior to construction. Listed below are general requirements for the Quality Control and Assurance (QC&A) Plan.

Subgrade: The RPR will observe subgrade preparation and look for the presence of trees, stumps, roots, boulders, debris, frozen soil, litter, and other unsuitable materials. Unsuitable materials are as listed above or are defined as any material not having adequate stability to act as a proper foundation for the liner or cap system. Suitability of materials shall be determined by the QC&A Officer. Unsuitable materials on the subgrade will be removed and replaced with suitable material as necessary. If core outs are required, the unsuitable foundation materials shall be cored out to a minimum depth of 2' below surface elevation and be replaced with material capable of providing a suitable foundation.

The subgrade will be proof rolled or scarified to a minimum depth of 8" (liner subgrade) or 6" (cap subgrade) and recompacted prior to installation of the base liner or infiltration layer. The minimum allowable density after recompaction is 95% (liner subgrade) or 90% (cap subgrade) of the determined Standard Proctor Density. If the subgrade is scarified and recompacted, the subgrade will be tested for density control with a nuclear density meter at a *minimum* interval of one test per acre of prepared subgrade. Areas where the tests fail will be recompacted and retested until passing tests are achieved.

Geonet Drainage Composite (Groundwater Diversion layer): The geonet drainage composite shall be a minimum of a 200 mil HDPE geonet with 8 ounces per square yard nonwoven, needle punched geotextile fabric bonded to each side of the geonet. Geonet cores will be connected to adjacent geonet cores using plastic zip ties or other methods recommended by the Manufacturer.

Top layer geotextile seams shall be heat tacked or sewn to limit fabric movement during soil placement.

Prior to geonet installation the Contractor shall provide the manufacturer's raw materials and roll certifications to the Owner. The materials delivered to the project shall be checked against the roll certifications to insure that the proper material was delivered to the site. Geonet rolls that do not have proper certifications will not be allowed to be used on the project. Roll certifications will be submitted to IDNR in the final QC&A Report.

Compacted Clay Component of the Base Liner: The compacted clay component of the base liner will be constructed from glacial till materials approved by the QC&A Officer. The hydraulic conductivity of potential base liner soils will be evaluated in the laboratory by determining the hydraulic conductivity of sample soils in relation to the Standard Proctor Density and Standard Proctor moisture content. The maximum allowable hydraulic conductivity of a base liner soil is 1×10^{-7} cm/sec.

The material will be placed in lifts no thicker than 8 inches after compaction. The base liner will be tested for moisture and density control with a nuclear density meter at a minimum interval of five tests per 8 inch lift per acre of base liner constructed. The minimum allowable density is 95% of the determined Standard Proctor Density or the minimum allowable density as determined by an acceptable zone determination. Minimum moisture content is the optimum moisture content as determined by the Standard Proctor Method or the minimum allowable moisture content as determined by an acceptable zone determination. The maximum moisture content is 4% above the optimum moisture content as determined by the Standard Proctor Method. Note that reference to the acceptable zone determination above does not establish that this method will be utilized. Areas where the moisture/density tests fail will have moisture adjusted (if necessary), be recompacted, and be retested until passing tests are achieved. The soil may have to be removed and replaced to obtain passing tests.

Laboratory hydraulic conductivity tests using shelby tubes will also be performed. A minimum of five (5) shelby tube samples will be collected from the compacted clay component of the base liner. The minimum of five shelby tube samples was chosen to represent the potential variation of conditions during sampling as well as to allow a statistical analysis to be performed on the shelby tube test results. The shelby tube sample results will be analyzed at mean plus two standard deviations to document hydraulic conductivities of no more than $1x10^{-7}$ cm/sec. The laboratory and statistical results will be included in the QC&A Report submitted at the conclusion of each liner construction project. Additional shelby tube samples may be taken at the discretion of the QC&A Officer if the statistical analysis does not result in a mean plus two standard deviation value of hydraulic conductivity of less than $1x10^{-7}$ cm/sec or if inconsistencies in the sampling results are noted by the QC&A Officer. The voids created by the shelby tubes in the compacted clay component of the base liner will be backfilled with bentonite material.

The subgrade will be surveyed prior to the start of clay liner installation to establish starting grades for the liner. Progress stakes will be provided for the clay liner as necessary, and the surface of the compacted clay liner will be surveyed prior to the installation of the FML to document liner thickness of a minimum of 2.25'. The grade will be spot checked as needed to determine elevation compliance of the Contractor's GPS equipment. The surface of the clay liner shall be graded to a tolerance of 0 to 0.1'.

All laboratory test results, hydraulic conductivity/compaction/moisture content curves and plots, and field density reports will be submitted to the IDNR in the QC&A Report prior to certification of the area for solid waste deposition.

Note that the testing regimen detailed above will also apply to the infiltration layer in a closure cap.

Flexible Membrane Liner: The flexible membrane liner (FML) will be 60 mil HDPE. Both sides of the FML will be textured on the sideslopes of landfill cells that are steeper than 5%. Smooth FML is allowed on slopes flatter than 5%. The FML shall meet the requirements of Geosynthetic Research Institute (GRI) GM-13 "Test Methods, Test Properties and Testing Frequency for High Density Polyethylene (HDPE) Smooth and Textured Geomembranes" and applicable sections of the construction specifications.

Prior to FML installation the Contractor shall provide the manufacturer's raw materials and roll certifications to the Owner. The materials delivered to the project shall be checked against the roll certifications to insure that the proper material was delivered to the site. Geomembrane rolls that do not have proper certifications will not be allowed to be used on the project.

The FML installer shall provide written acceptance of the subgrade surface prior to the commencement of FML installation.

All field seams shall be made by either double fusion (hot wedge) or extrusion welding. The RPR will be on site during welding of the FML. All seams shall be non destructively tested by the FML installer using air pressure testing for double fusion seams and vacuum box testing for extrusion welded seams.

A minimum of one destructive test will be performed by the FML installer per 500 linear feet of seam. This distance may be decreased during construction at the discretion of the QC&A Officer. The location of destructive tests will be determined by the RPR. Destructive tests will be done on the side slope as much as practical, tests on the base will be conducted as far from leachate collection infrastructure as possible. The destructive tests must meet the requirements listed in GRI GM-19a "Seam Strength and Related Properties of Thermally Bonded Polyolefin

Geomembranes/Barriers". A minimum of two (2) destructive test samples will be sent to an Independent Laboratory for testing.

Seams that fail the non-destructive or destructive testing shall be repaired and retested until passing tests are obtained.

Panel information, roll certifications, and test results on the FML will be submitted to IDNR in the final QC&A Report.

Note that the testing regimen detailed above will also apply to the flexible membrane liner in the composite closure cap unless a LLDPE or PVC geomembrane is utilized in the closure cap. If a LLDPE or PVC geomembrane is utilized QC&A requirements for the geomembrane will be submitted in the QC&A Plan for the specific project.

Leachate Piping: The HDPE piping used for the leachate piping will be fusion welded in accordance with manufacturers recommendations. Connections between new and existing piping will be made in the presence of the RPR. Rock backfilling of the pipes will also be done in the presence of the RPR. Note that limestone is not allowed for bedding of the leachate piping within the solid waste boundary. Leachate conveyance piping outside of the solid waste boundary must have containment measures as per IAC 567-113.7(5)b(10). Dual wall pipe, backfill consisting of a 50:50 mixture of bentonite and sand, AquaBlok as manufactured by AquaBlok, Ltd., or an equivalent material will be used to satisfy containment requirements. Tees, fittings, and other appurtenances shall conform to the manufacturers recommendations.

Manholes: Leachate manholes will be backfilled with either a 50:50 mixture of bentonite and sand, AquaBlok, or an equivalent material to provide secondary containment around the structures as per IAC 567-113.7(5)b(10).

The manholes will be installed and backfilled in the presence of the RPR.

Drainage Layer: The drainage layer will be composed of a minimum of 12 inches of a high hydraulic conductivity material with a hydraulic conductivity of at least 1×10^{-2} cm/sec. If sand is used as the primary drainage layer, it will meet the hydraulic conductivity requirement above and have no more than 5% of the material (by weight) passing a #200 sieve. Drainage layer material will have hydraulic conductivity verified in the laboratory before use is allowed. A copy of the laboratory hydraulic conductivity tests will be submitted to IDNR in the final QC&A Report.

Drainage layer material will be installed in the presence of the RPR. Drainage layer thickness will be physically measured by the RPR with a shovel and tape (or another acceptable method) incrementally as the sand is installed to document drainage layer material thickness.

Measurement shall be at least once for every 100 foot by 100 foot area of drainage layer installed. Drainage layer depth will also be checked at the toe of slopes and other significant grade changes. The surface of the drainage layer shall be graded to a tolerance of 0 to +0.1'.

Geosynthetic cover will be installed over the drainage layer to protect the drainage layer from erosion and to reduce leachate generation from the exposed drainage layer.

Reinforced Landfill Cover over Drainage Layer: A reinforced landfill cover (RLC) will be placed on the 12" (minimum) thickness of drainage layer sand upon completion. The RLC will be scrim reinforced polyethylene and will be ballasted, anchored, and seamed in accordance with Manufacturer's recommendations.

The RLC will be installed in the presence of the RPR.

As operations require, landfill staff will remove portions of the RLC from the drainage layer sand prior to placing choice MSW waste. Typically, the RLC will be removed on an as needed basis from an area approximately equal to the typical daily waste cell size. When the RLC is removed, landfill staff will visually review the sand surface to look for the presence of soil or other debris on the sand prior to waste deposition. Photos will be used for documentation purposes as necessary. If there is visible debris on the drainage layer sand surface, the debris will be removed and the depth of sand reconfirmed. Waste will not be placed on the drainage layer until the surface of the sand is visually reviewed by staff.

Quality Control and Assurance Report: A final QC&A Report will be submitted to IDNR upon the completion of construction. A copy of the final report will also be maintained at the landfill. At a minimum, the final report shall include the following:

- Title page and index
- Name and permit number of the South Central Iowa SLF
- Contact information for the QC&A Officer
- Contact information for all contractors associated with the construction of the project
- Applicable soil, FML, and drainage layer test results
- Copies of the Resident Project Representative's reports
- Representative photos from various stages of the construction process
- A signed/sealed statement by the QC&A Officer that the unit was constructed in general accordance with rule 113.7 (455B) and the approved plans and specifications

Record Drawings showing variations from the plans will also be submitted to the IDNR. Note that the Record Drawings may be submitted separately from the QC&A report to expedite the submission of the QC&A report.

APPENDIX 4

DES MOINES METROPOLITAN
WASTEWATER RECLAMATION AUTHORITY

CITY OF DES MOINES, OPERATING CONTRACTOR

October 30, 2025

Marcia Beeler
South Central Iowa Landfill Agency
2520 State Hwy 92
Winterset, IA 50273

RE: Hauled Waste Discharge Permit No. B10161

Dear Ms. Beeler:

Enclosed is your Hauled Waste Discharge Permit for the South Central Iowa Landfill facility on Highway 92 in Winterset. Your permit is valid until the expiration date; however, an annual permit fee is required.

Please keep us informed of any changes that may affect the characteristics or volume of your facility's hauled waste to the WRF. Please contact me with any questions or comments at 515/323-8133 or via email at pcebert@dmgov.org.

Sincerely,

Paul Ebert
WRF Regulatory Compliance Manager
WRA Wastewater Reclamation Facility

PE/ajf

Enc: Hauled Wastewater Discharge Permit

CC: T. Whipple, HLW Engineering (twhipple@hlwengineering.com)
File

DES MOINES METROPOLITAN
WASTEWATER RECLAMATION AUTHORITY

CITY OF DES MOINES, OPERATING CONTRACTOR

DES MOINES METROPOLITAN WASTEWATER RECLAMATION AUTHORITY
HAULED WASTE DISCHARGE PERMIT
PERMIT NO. B10161

In accordance with the provisions of the Municipal Code of Des Moines, Chapter 118, Article III known as the Industrial Waste Ordinance,

South Central Iowa Landfill Agency
2520 State Hwy 92
Winterset, IA 50273

is hereby authorized to deliver wastewater from the RCRA Subtitle D non-hazardous landfill via a properly licensed and maintained tank truck to the Des Moines Metropolitan Wastewater Reclamation Facility in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the industrial user of its obligations to comply with all applicable pretreatment regulations, standards, requirements, or laws that are or may become effective during the term of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of the City of Des Moines Industrial Waste Ordinance.

EFFECTIVE DATE: November 1, 2025

EXPIRATION DATE: October 31, 2030

RENEWAL DATE: July 31, 2030

The industrial user must file an application for permit renewal 90 days prior to the expiration date.

Scott Hutchens, P.E., WRA Director
City of Des Moines
WRA Wastewater Reclamation Facility

REVISED: September 24, 2025

PART 1 - REQUIREMENTS RELATING TO TRUCKED WASTES

The Des Moines Metropolitan Wastewater Reclamation Authority (WRA) will accept process wastewater from the Industrial User (IU) under the following terms:

A. Process Wastewater Characteristics and Volume

1. The pH of any load must not be less than 5.0 S.U. or greater than 12.0 S.U.

2. The COD of any load delivered to the headworks (Structure 07) must not exceed 100,000 mg/L.

3. The Arsenic Daily Maximum concentration of any load shall not exceed 0.38 mg/L, and the Total Daily Loading of Arsenic shall not exceed 0.014 lbs/day.

4. Total Toxic Organics (TTO) will be monitored routinely by the WRA. TTOs are sum of all volatile organic compounds detected using EPA Method 624.

5. The number of truck loads delivered to the Des Moines Metropolitan Wastewater Reclamation Facility (WRF) shall not exceed five (5) per day. The IU may request an increase in writing. The WRF reserves the right to further restrict the volume of leachate per day in order to meet pollutant loading limits for the WRF as identified in Chapter 118-343.

6. Hauled waste shall be delivered to the headworks (Structure 07) at the WRF, unless directed otherwise by WRA personnel.

7. Only landfill leachate wastewater is allowed by truck without advanced notice to and permission from the WRA Director.

B. Treatment Charges

1. Charges must cover all the costs incurred by the WRA to handle and treat the wastewater as determined by the WRA Director, as well as the costs to analyze the wastewater.

2. Charges are billed monthly with NET 30 terms payable to DES MOINES WRA and mailed to

   City of Des Moines Treasurer's Office
   P.O. Box 1633
   Des Moines, IA 50306-1633

3. Treatment charges for waste loads disposed of at the WRF are listed on the WRA website (www.dmmwra.org/180/Hauled-Waste), unless a special waste rate has been assigned.

4. Reevaluation of charges:
   (a) At a minimum, charges will be reevaluated annually and take effect July 1st.
   (b) Charges may be reevaluated at the request of the IU or by the WRA at any time due to waste characteristic changes in the process wastewater.
   (c) Changes in treatment charges are effective after 30-days' notice to the IU.

C. Sampling & Analysis

1. WRA Sampling & Analysis
   (a) The WRA may, at a minimum, perform daily sampling and measurement of pH, O&G, COD, TSS, TKN, %TS, %VS at the cost provided for in Chapter 118-352. The cost will be assessed to the IU and included in the charges in Part 1, B.1. above.
   (b) The WRA will perform other sampling and analysis at the expense of the IU as necessary to accurately assess charges and pollutant loadings.
   (c) Samples shall be taken from the tank truck at the WRF prior to discharge or mixing with any other waste.

2. Industrial User Sampling & Analysis
   (a) The IU shall perform an annual scan of priority pollutants and report results to the WRA.
   (b) Such scan does not eliminate the need for the WRA to perform its normal sampling and analysis.
   (c) Samples shall be taken from the leachate collection vessel used to fill tank trucks for transport to the WRF.

D. Hours of Operation

1. The WRA will accept trucked waste 24/7 if drivers are familiar with the WRF manifesting, scaling, and unloading processes.

2. The WRA has the right to restrict hours as necessary and restrict truck driver access as necessary. Additional costs to provide service will be charged to the IU.

E. Termination of this Permit

1. This permit may be terminated by the IU by making a written request to the WRA providing 30-days' advanced notice.

2. This permit may be terminated by the WRA for any reason by providing 30-days' advanced written notice to the IU.

3. Delivery of wastes may be immediately suspended by the WRA if acceptance of this wastewater causes, or is anticipated to cause, interference, pass through of pollutants, or violation of any environmental permit held by the WRA.

F. Automatic Permit Extension

Expired permits shall remain effective and enforceable until the permit is reissued unless the IU is notified of permit termination by the WRA Director. (Chapter 118-372)

G. Damages

Anyone delivering or discharging wastes to the WRF whose waste causes upset, interference, or pass through is liable for the costs incurred by such incident and to penalties as allowed under city, state, and federal law.

H. Spill Control Plan

When required to do so by the WRA, the IU shall develop a Spill Control Plan to address potential spills or slugs.

PART 2 – REPORTING REQUIREMENTS

A. Monitoring Reports

The WRA will provide the IU with routine reports of the concentration of pollutants in the IU's effluent which are being monitored as described above.

1. Semi-Annual Reports

A certification statement, signed by an Authorized Representative, which uses the language required by federal law (40 CFR 403.12(l)), must be returned to the WRA every six (6) months. The industry is certifying that information it has submitted to the WRA is true and accurate. Those with TTO limits in wastewater discharge permits have an additional certifying statement regarding use and disposal of these substances. The IU shall submit a semi-annual report to the WRA as follows:

Semi-Annual	Periods Covered
1st Half	January – June
2nd Half	July - December

Semi-Annual Report Format

(a) Identifying information.
(b) Measurement of pollutants for any samples collected by the IU, per Chapter 118-377(5).
(c) Certification and signature by IU.
(d) Compliance schedule (as required).
(e) Additional monitoring (as required).

2. Reports - Additional Monitoring

If the IU monitors any permitted pollutant from the sample location identified in Part 1.C more frequently than required by this permit, using test procedures prescribed in 40 CFR Part 136, the results of such monitoring shall be submitted to the WRA. Such monitoring results shall be summarized and reported to the WRA as part of the semi-annual report.

B. Accidental Discharge Report

The IU shall notify the WRA immediately of all discharges that could cause problems to the POTW, including any slug loadings, as outlined in Chapter 118-349. Formal written notification discussing circumstances and remedies shall be submitted to the WRA within five (5) days of the occurrence. The following procedures shall be followed:

1. Accidental discharges that contain pollutants that exceed the permitted limit by 5x or that exceed a designated slug discharge concentration shall be reported immediately.

2. Accidental discharges that may cause permanent damage to treatment system shall be reported immediately. These discharges include, but are not limited to, pollutants that may cause a fire or explosion hazard, pH of less than 4.0 or greater than 13.0 for, any pollutant in a concentration that would increase the atmosphere in the POTW above the LC50 for human exposure, and any pollutant that may increase the concentration in the influent to the WRF enough to decrease treatment efficiency.

3. The IU shall notify the WRA immediately by telephone at 515/323-8000 or 8133. The notification shall include the name of the person making the call, telephone number where said person can be reached, location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective action taken.

The party making the call shall be available by phone for a minimum of fifteen (15) minutes after the notification is made. This is so that a member of the WRA may contact the industry representative for more information, if necessary.

4. Within five (5) days following an accidental discharge, the IU shall submit to the WRA a detailed written report. The report shall specify:

   (a) Description of the upset, slug or accidental discharge, the cause thereof, and the impact on the IU's compliance status. The description should also include location of discharge, type, concentration and volume of waste.
   (b) Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.
   (c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such a slug discharge, accidental discharge, or other condition of noncompliance.

C. Anticipated Noncompliance

The IU shall give advance notice to the WRA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

D. Signatory Requirements

1. All applications and reports submitted to the WRA must contain the following certification statement and be signed by an authorized representative of the IU as defined below:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

   Authorized Representative means:
   (a) An executive officer of a corporation.
   (b) A general partner of a partnership.
   (c) The proprietor of a proprietorship.
   (d) The conservator, trustee, attorney in fact, receiver or other person or agent authorized in law and in fact to act on behalf of IUs which are not corporations, partnerships, or proprietorships or on behalf of other entities which must legally act through an agent.
   (e) Any other authorized representative of (a), (b), (c), or (d) above if the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the discharge originates, such as the position of plant manager or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company and the written authorization is submitted to the WRA Director.
   (f) Any other person authorized by law to act on behalf of any entity.

2. If an authorization under paragraph (d) of this subpart is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph (d) of this subpart must be submitted to the WRA prior to or together with any reports to be signed by an authorized representative.

E. Wastewater Reclamation Authority Address and Phone Number

All reports, applications and correspondence shall be submitted by fax (515-323-8063) or to the following address:

Des Moines Metropolitan Wastewater Reclamation Authority
Attention: Pretreatment Department
3000 Vandalia Road
Des Moines, IA 50317

Telephone notification shall be to WRA - 515/323-8000 or 8133.

PART 3 - GENERAL CONDITIONS

The EPA in 40 CFR 403 requires wastewater treatment plants with pretreatment authority to have the following authority over all dischargers:

A. Duty to Comply

You must comply with the terms, conditions, and limits of this permit and of city ordinance. (Chapters 118-321 and 118-376)

B. Duty to Mitigate

The IU shall take all reasonable steps to minimize, correct, or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting the WRF, collection system, human health or environment. (Chapter 118-349)

C. Changes Resulting in New or Increase Pollutants

New or increased contributions of pollutants or changes in the nature of pollutant discharged to the WRF, whether due to changes in production, activity, flow or construction, shall require ninety (90) days prior approval by the WRA Director. (Chapter 118-370(11))

D. Permit Transfer

The IU shall not reassign or transfer this permit. New owners must apply for a new wastewater discharge permit sixty (60) days prior to a change of ownership. (Chapter 118-374)

E. Inspection of Premises, Records, Equipment, Methods and Discharges

You must permit authorized representatives of the City of Des Moines to inspect and sample in accordance with Chapter 118-405.

F. Confidential Information

No information shall be confidential except as specified in Chapters 118-381 and 118-382.

G. Dilution

The IU shall not increase the use of potable or process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with limitations contained in this permit.

H. Annual Publication

A list of all permitted users which significantly violated pretreatment standards or requirements (including permit requirements) during the twelve (12) previous months shall be annually published in the largest daily newspaper within the service area. (Chapter 118-396)

I. Civil and Criminal Penalties

Violation of pretreatment standards and requirements, administrative orders, or compliance schedules may subject the IU to civil and criminal penalties contained in Chapter 118-400 and Iowa Code 364.22(1).

SECTION E

Development and Operations Plan
Emergency Response and Remedial Action Plan
MSWLF Operator Certification Numbers

DEVELOPMENT AND OPERATIONS PLAN
EMERGENCY RESPONSE AND REMEDIAL ACTION PLAN
MSWLF OPERATOR CERTIFICATIONS

113.8(4) Development and Operations Plan

The Development and Operations Plans (DOP) has been revised and is included in Appendix 1 of this Section.

113.8(5) Emergency Response and Remedial Action Plan

An updated Emergency Response and Remedial Action Plan (ERRAP) is included in Appendix 2 of this Section.

113.8(6) MSWLF Operator Certifications

MSWLF Operator Certification numbers for South Central Iowa Landfill Agency employees are included in Appendix 3 of this Section.

APPENDIX 1

DEVELOPMENT AND OPERATIONS PLAN

The following is intended to comply with the requirements of subrule 567 IAC 113.8(4):

113.8(4) DEVELOPMENT AND OPERATIONS PLAN (DOPs)

Owner of the Facility

South Central Iowa Landfill Agency
2520 Highway 92
Winterset, IA 50273
515-739-1915

Responsible Official for the Facility

Chair – Diane Fitch
South Central Iowa Landfill Agency
2520 Highway 92
Winterset, IA 50273
515-739-1915

Certified Operator Responsible for Operation at Facility
Certified Landfill Operator Numbers

Marcia Beeler, Manager (Certified Landfill Operator #30033)
South Central Iowa Sanitary Landfill
2520 Highway 92
Winterset, IA 50273
515-739-1915
Alan Utsler (Certified Landfill Operator #30474)
Verl Dillinger (Certified Landfill Operator #30984)

Service Area of the Facility

The South Central Iowa Landfill Agency (SCILA) is a 28E organization with the following service area:

> All cities and unincorporated areas of Madison County, excluding Macksburg; all cities and unincorporated areas of Warren County, excluding Carlisle, Hartford, and Norwalk; and the Dallas County cities of Dallas Center, DeSoto, Dexter, and Van Meter; and the City of Osceola in Clarke County.

Days and Hours of Operation

Monday through Friday from 8:00 AM – 3:30 PM
Saturday from 8:00 AM – 11:00 AM except from the second Saturday in January until the third Saturday in March.

567-113.8(1) – Prohibited Operations and Activities

113.8(1)a. Waste screening for prohibited materials

1. The landfill staff inquires about non-accepted and prohibited items (e.g. tires, appliances, waste oil, etc.) at the scale. Operators at the working face visually screen every load of waste as it is unloaded and during the spreading and compaction process, removing all prohibited items and reporting back to the scale attendant.

2. A more thorough waste screening of a random load (random load check) is typically conducted once per week. Records of random load checks are maintained in the scale house.

3. All landfill staff receives training for waste screening as applicable.

4. Any prohibited waste observed by staff will be removed and handled as required by the operations plan and any State and Federal regulations. The appropriate State and Federal authorities will be notified if regulated hazardous waste or PCB waste is discovered at the facility.

5. Staff will maintain records of any rejected or problem waste discovered. Staff will also maintain records of any rejected loads and any actions that result in response to the presence of hazardous materials and/or PCB wastes in any load.

113.8(1)b. Materials prohibited from disposal

All materials listed in subrule 113.8(1) "b" are prohibited from disposal either by State or Federal regulation at the South Central Iowa SLF. White goods, scrap metal, tires, and household hazardous materials are accepted for recycling/proper disposal.

Petroleum-contaminated soil is accepted for remediation and usage as alternative daily cover or for direct disposal at the working area as provided for in the landfill permit. Non-hazardous items that may require special handling are accepted on a case-by-case basis.

113.8(1)c. Open burning and fire hazards

No open burning is allowed within the permitted boundary of the South Central Iowa SLF. Note that tree and brush burning is allowed within a non-waste area that was removed from

the site permitted boundary in 2024. The fueling of all equipment and vehicles, and any other activities that may produce sparks, will be conducted at least 50 feet away from the working face.

113.8(1)d. Scavenging and salvaging

Scavenging is prohibited at the South Central Iowa SLF.

113.8(1)e. Animal feeding and grazing

No domestic animal feeding or grazing is allowed at the South Central Iowa SLF.

567-113.8(2) – Disposal Operations and Activities

113.8(2)a. Survey controls and monuments

1. The property boundary of the South Central Iowa SLF has been surveyed and marked by a professional land surveyor.

2. The boundaries of all new MSWLF units will be surveyed and marked by a professional engineer prior to the placement of waste.

3. Survey monuments have been established to check vertical elevations and the progression of fill sequencing. Permanent monuments will be established and maintained by a professional land surveyor.

4. All survey stakes and monuments are clearly marked.

5. A professional engineer will inspect the permanent survey monuments biennially. Any missing or damaged monuments will be replaced or repaired.

113.8(2)b. First lift

1. Waste will not be placed in a new disposal unit until the following occur:

    - A Quality Control and Assurance Report, in accordance with subrule 113.7(6)"d", documenting the construction of the disposal unit is submitted to the IDNR.
    - An IDNR Field Office #5 inspection is completed in accordance with subrule 113.4(6).
    - The IDNR Central Office authorizes solid waste disposal in the new unit.

2. In most instances, construction and earth-moving equipment will not operate directly on the liner and leachate management system. However, operating equipment on the

drainage layer is required to install the drainage layer material on the liner. A minimum of 1' of drainage layer material shall be maintained beneath vehicles with a ground pressure less than 5 psi, 2' for all other tracked vehicles and flotation tire equipped vehicles, and 3' for trucks and other wheeled hauling equipment. All vehicles shall minimize turning on the drainage layer material during delivery and placement.

Small rubber tired ATV's may operate on the liner during FML liner installation. The ATV's shall have a ground pressure of less than 5 psi and shall meet FML manufacturer's requirements. Waste disposal operations will begin at the edge of the new disposal unit by pushing waste out over the liner and leachate collection system. Compactors and other similar heavy equipment will 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.

3. 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. 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. The first 4 feet of waste shall also be lightly compacted to promote leachate migration to the drainage layer.

4. Documentation will be placed in the operating record and submitted to the IDNR that adequate cover material was placed over the top of the leachate collection system in any new disposal unit and/or that freeze/thaw effects had no adverse impact on the compacted clay component of the liner for all new waste disposal units. Note that the liner cover material is not required for side slopes "greater than 10 feet above the base liner". This is in accordance with the IDNR correspondence to all landfills dated September 26, 2012.

113.8(2)c. Fill sequencing

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

2. The fill sequencing will 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 subrule 113.10. Earthen berms and terraces will be strategically placed about the workface to control run-on and runoff, and to help contain leachate and direct it into the leachate collection system.

113.8(2)d. Working face

1. The working face will be no larger than necessary to accommodate the rate of disposal in a safe and efficient manner. The size of the working face will be determined on a daily basis by landfill operators depending on weather conditions, wind speed and direction, anticipated waste volume, anticipated large loads, anticipated special waste, the available daily cover, surface water drainage, and other applicable factors.

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

3. Litter will be controlled primarily through the operational activities at the working face. The working face is sized using the factors discussed in Item (1) above to minimize blowing litter as much as practical. Temporary and boundary fences are also used to control litter. Litter will be collected as discussed in Section 113.8(3)”f” below.

4. Proper operating activities at the working face will prevent the harborage of vectors and minimize the attractions of vectors. This is mainly accomplished by the proper use of cover materials including approved alternative daily cover (ADC).

5. Employees at the working face have been trained to visually recognize universal symbols, markings, and indications of prohibited wastes pursuant to subrule 113.8(1)"b”. Such training was discussed in Section 113.8(1)”a”(3) above.

113.8(2)e. Special wastes

Special wastes are not accepted unless authorized by a special waste authorization (SWA) issued by the IDNR or as provided for in 567 IAC-109 and the landfill’s permit. SWA’s are not required for general special wastes consisting of asbestos-containing material; petroleum-contaminated soil; and stabilized grit, bar screenings, and grease skimmings. The acceptance of these special wastes at the landfill is not required. The disposal of special wastes and general special wastes will be in accordance with the instructions, conditions, and limitations contained in the SWA.

113.8(2)f. Cover material and alternative cover material

1. Daily Cover. Daily cover material will be applied to exposed waste at the end of each operating day, or more frequently if necessary to control vectors, fires, odors, blowing litter, and scavenging. At least six inches of soil cover material or an approved alternative daily cover material will be used. Soil cover material is available from soil stockpiles.

At this time the South Central Iowa SLF has been approved to use the following as Alternative Daily Cover (ADC): foundry sand mixed with soil and Tarp Armor geotextile. Periodically, petroleum contaminated soil may be received and following remediation as prescribed in 567 IAC-109, may be used for daily cover.

2. Intermediate Cover. The landfill operator will apply at least one foot of intermediate cover of compacted earth to any area of the site that will not be utilized for further disposal of solid waste for more than 30 days. The landfill operator will apply at least two-feet of compacted earth to any area of the site that will not be utilized for further disposal of solid waste for more than 180 days. The cover will be graded to allow surface water runoff. The intermediate cover will be seeded if the area will not receive waste for a full growing season.

3. Scarification of Cover. Any cover that might prevent the downward migration of leachate and is at least 5 feet from the disposal unit boundary will be scarified prior to the use of that area as a working face. The removal of some of the cover material prior to the use of an area as a working face is allowed and encouraged to conserve airspace and promote the vertical migration of leachate to the leachate collection system.

4. Final Cover. Final cover over a waste disposal area that is to be closed shall be constructed and maintained according to the closure and postclosure requirements of 567 IAC 113.12 and 113.13 and in accordance with the approved Closure/Postclosure Plan unless amended and authorized by the IDNR.

113.8(2)g. Leachate seeps

Upon being identified, leachate seeps will be contained and repaired when weather and surface conditions allow. Any soils outside of the waste boundary that are contaminated by a leachate seep will be excavated and then disposed of within the landfill waste boundary. Soils contaminated with leachate may be used for daily cover material.

113.8(2)h. Leachate recirculation

Leachate recirculation over the Subtitle D composite lined areas is allowed as per Special Provision X.5 of the SDP Permit.

113.8(2)i. Differential settlement

Those areas of differential settlement sufficient to interfere with runoff and run-on will be brought back up to the appropriate elevation of the surrounding cover and drainage restored as soon as practical. Areas where differential settlement occurs will be monitored after restoration.

567-113.8(3) Facility Operations and Activities

113.8(3)a. Controlled access

The entrance gate is locked during non-operating periods and restricts access to the site. The site is fenced and restricts access to disposal and recycling areas and aids in litter control. Natural buffers and site topography also restrict site access.

113.8(3)b. Scales and weights

All solid waste collection and transport vehicles are weighed on a scale upon entering the site. The current scale license from the Iowa Department of Agriculture and Land Stewardship is included in Appendix 2 of Section D of this Permit Renewal Documentation.

Information on the waste received and disposed of at the South Central Iowa SLF is retained on site and is reported to the IDNR quarterly as part of the Quarterly Solid Waste Fee Schedule and Retained Fees Report, Form 542-3276.

113.8(3)c. All-weather access to disposal

All major internal roads are constructed with gravel, crushed concrete, or similar material and maintained in good condition for all weather access. The landfill maintains an all-weather fill area that is accessible during all weather conditions when solid waste is being received.

113.8(3)d. Salvaged and processed materials

The South Central Iowa SLF accepts and recycles white goods, scrap metal, and tires. All salvaged (recyclable) materials accepted at the landfill are stored and regularly removed in accordance with the special provisions of the landfill permit and any specific rules. The materials are stored in a manner that does not create a nuisance or encourage the attraction or harborage of vectors.

113.8(3)e. Vector control

The landfill operator maintains adequate cover over the workface and closed areas, which has proven to be effective in controlling flies, birds, rodents, and other vermin. Odors are also kept to a minimum by maintaining adequate cover. Salvage areas are kept neat and free of unrelated debris, limiting habitat for vectors.

113.8(3)f. Litter control

Litter will be confined to the property boundary through the use of fences and unloading and cover operating practices. Temporary fences located around the site, along with the property

fence, serve to control blowing litter and to keep litter from entering neighboring properties as much as practical. The operators will spend time handpicking litter as needed. A litter log is maintained at the site to document litter collection efforts and weather related data.

113.8(3)g. Dust

All major internal roads are constructed with gravel, crushed concrete, or similar material and maintained in good condition for all weather access.

113.8(3)h. Mud

All major internal roads are constructed with gravel, crushed concrete, or similar material and maintained in good condition for all weather access. Trucks leaving the working face travel on gravel surfaced roads for over ¼ mile prior to entering a public road. The maintenance of site roads along with the travel distance between the working face and the site entrance combine to limit the deposition of mud off the landfill site. If mud originating from the landfill is ever noted on the public road, the South Central Iowa SLF staff will use its equipment and personnel to remove the mud from the roadway as soon as practical.

113.8(3)i. Leachate and wastewater treatment

The leachate management system is managed and maintained pursuant to the requirements of subrule 113.7(5)"b". The components of the leachate collection system piping are cleaned at least once every three years. The South Central Iowa SLF leachate system includes leachate collection lines within the Subtitle D composite lined areas, six leachate extraction wells and two leachate collection headers in the unlined area, and the seepage collection pipe under the Subtitle D composite liner in Cells 1 and 2. Leachate is currently conveyed to one of two (2) Subtitle D composite lined lagoons (the west lagoon has a capacity of approximately 651,120 gallons, the east lagoon has a capacity of approximately 1,005,700 gallons) and then either recirculated into the waste mass in Subtitle D composite lined areas or truck hauled to the Des Moines Metropolitan Water Reclamation Facility for treatment and disposal. For additional details regarding the leachate management system, see the Design Plans and Specifications section of this Permit Renewal Documentation.

113.8(3)j. Financial assurance

The South Central Iowa SLF currently uses a dedicated fund to meet Financial Assurance requirements. Updated closure/postclosure cost estimates, along with the "Municipal Waste Sanitary Landfill Financial Assurance Annual Report" form are submitted to IDNR prior to April 1 of each year if possible. The Financial Assurance approval letter for 2025 is included in Section H.

APPENDIX 2

Emergency Response and Remedial Action Plan

Prepared For:

South Central Iowa Landfill Agency
Madison County, Iowa

IDNR Permit #61-SDP-01-78P

February, 2026

Document Purpose:

The plan was prepared by HLW Engineering Group for the South Central Iowa Landfill Agency (SCILA) to comply with Iowa Department of Natural Resources requirements for an Emergency Response and Remedial Action Plan (ERRAP). The contents of this plan are based upon information provided by the Client. HLW has made every effort to incorporate reasonable and pertinent information for the South Central Iowa Sanitary Landfill in the ERRAP. Because conditions change and it is impossible to foresee all emergencies and disasters, this plan should serve only as a guidance document. It is the responsibility of the SCILA to provide training to all employees related to this plan and emergency responses, to modify or add to this plan based upon future facility changes, and to seek additional advice from outside experts if needed.

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Attachment A

Emergency Checklist

Attachment B

IDNR Notification of Hazardous Conditions requirements
EPA Reporting Requirements, Oil Spill and Hazardous Substance Release

Attachment C

Emergency Contact List

NOTE: This document cannot foresee all possible emergency situations that will be encountered at a landfill site. If in doubt, do not endanger yourself or others. Leave the facility immediately and notify others to leave the facility. Call 911 as soon as practical.

A. Facility information

A.1. Permitted agency

South Central Iowa Landfill Agency (SCILA)

A.2. DNR permit number(s)

61-SDP-01-78P

A.3. Responsible official and contact information

Marcia Beeler, Landfill Manager
South Central Iowa Landfill Agency
2520 State Highway 92
Winterset, IA 50273-8185
Phone: (515)739-1915

The Landfill Manager will have the responsibility for coordinating emergency response procedures. If the Landfill Manager leaves the premises during normal operating hours other personnel will be given the responsibility to coordinate emergency response activities.

A.4. Certified operator and contact information

Marcia Beeler, Landfill Manager
South Central Iowa Landfill Agency
2520 State Highway 92
Winterset, IA 50273-8185
Phone: (515)739-1915
IDNR Certified Landfill Operator #30033

A.5. Facility description

The SCILA operates a sanitary disposal project in Madison County that is classified as a sanitary landfill. The facility accepts municipal solid wastes from all cities and unincorporated areas in Madison County, excluding Macksburg; all cities and unincorporated areas in Warren County, excluding Carlisle, Hartford, and Norwalk; the Dallas County cities of Dallas Center, DeSoto, Dexter, and Van Meter; and the City of Osceola in Clarke County as defined in the comprehensive plan. Recyclable materials accepted include tires, white goods, scrap metal, and household hazardous materials.

The original landfilling area/vertical expansion area is an unlined disposal area that stopped accepting waste prior to October 1, 2007. Final cover, compliant with the rules in effect when waste disposal ceased in each area, has been constructed over the entirety of the original landfilling area/vertical expansion area. The Subtitle D horizontal expansion landfilling area consists of Cells 1, 2, 3, 4, 5 and Phase 1. Cell A&B. Each of these areas has been constructed with a Subtitle D compliant composite liner system. Current plans

call for the remainder of the Subtitle D horizontal expansion area to be constructed with a Subtitle D composite liner system as well. The facilities on site include a scalehouse, an equipment maintenance building, and two (2) Subtitle D composite lined leachate storage lagoons.

The original landfilling area has leachate extraction wells and leachate laterals installed. Subtitle D compliant horizontal expansion areas were constructed with a Subtitle D composite liner system, and future disposal areas will be constructed with a Subtitle D composite liner system as well. As the horizontal expansion progresses, additional leachate collection lines will be connected to the existing system. Leachate is conveyed to two leachate storage lagoons. The east leachate storage lagoon has a storage capacity of approximately 1,005,700 gallons, the west leachate storage lagoon has a storage capacity of approximately 651,100 gallons.

A network of wells along the perimeter of the property monitor for any off-site release of contaminated ground water.

The household hazardous materials (HHM) facility is a satellite collection site of Metro Waste Authority's Regional Collection Center (RCC), IDNR Permit #77-SDP-46-94P-HHM.

A.6. Site and environs map

The layout of the site and surrounding area is included on the figures included in Appendix 1 of Section D of this permit renewal documentation.

B. Regulatory requirements

B.1. Iowa Code Section 455B.306(6)"d" criteria citation

Chapter 567—113.8(5) of the Iowa Administrative Code (IAC) sets forth the requirements of the Emergency Response and Remedial Action Plans (ERRAPs) for Municipal Solid Waste Landfills. The purpose of this rule is to implement Iowa Code section 455B.306(6)"d" by providing the criteria for developing a detailed ERRAP for permitted municipal solid waste landfills.

B.2. Reference to Provisions of the Permit

The original ERRAP was approved on January 7, 2002. Updates to the ERRAP were included in the 2005 Development and Operational Plans and Specifications, which were approved on August 1, 2006. Revised ERRAP's were included in the 2010 Permit Renewal Documentation (Doc #56922) and the 2015 Permit Renewal Documentation (Doc #84260). As per Special Provision X.2.h of the SDP Permit, "An updated ERRAP shall be included with any request for permit modification…that require modification of the currently approved ERRAP."

C. Emergency conditions—response activities—remedial action

C.1. Failure of utilities

C.1.1. Propane

Propane is used solely for heating purposes at the South Central Iowa Sanitary Landfill.

Emergency Condition:

- Damage to the tank or service lines from weather related events or fire and explosion could cause disruption in the supply of propane.
- The level of propane in the tank drops such that supply is disrupted. This condition could lead to the loss of heat, freezing of water lines, and unpleasant working conditions for landfill personnel in the winter months.

Response Action: The following steps should be implemented in an emergency condition.

- If there is risk of danger, personnel should remove themselves from the area immediately.
- If an odor is present immediately leave the building. Leave door open on the way out. Do not turn lights on/off or unplug electrical cords.
- If anyone has incurred injuries, medical attention should be sought immediately, and the person removed from risk of further injury if possible.
- Insure that other personnel are not at risk of being injured.
- Close the service valve at the propane tank if possible.
- If a fire/explosion has occurred or there is an apparent risk of fire/explosion, call 911.
- Contact Landfill Manager.
- Contact the propane service provider.
- After verifying that the propane gas system is turned off and conditions are safe, alternate sources of heat such as electrical or kerosene space heaters should be used as necessary to keep water pipes from freezing in onsite buildings and to provided tolerable working conditions.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Short-term (<48 hours)-After verifying that the propane gas system is turned off and conditions are safe, place alternate sources of heat in ideal locations within buildings to keep water pipes from freezing and the working environment tolerable.
- Long-term (>48 hours)-After verifying that the propane gas system is turned off and conditions are safe, continue to use alternate sources of heat until propane service is restored or another permanent source of heating is provided.

C.1.2. Sanitary Sewer

A septic system is used for sanitary sewer services at the facility. Sewage is limited to domestic wastes from the scalehouse and maintenance building.

Emergency Condition:

- Sanitary services could be interrupted due to a blocked service line or tank failure/overfill.

Response Action: The following steps should be implemented in an emergency condition.

- Isolate any overflow sewage and try to contain. Personnel should use caution when handling sewage overflows.
- Contact Landfill Manager.
- Refrain from using facilities that drain into the septic system. These include all restrooms, sinks and building floor drains.
- Contact local sanitation service to repair system.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Short-term (<48 hours)-Refrain from using facilities that drain into the septic system until the septic system has been repaired.
- Long-term (>48 hours)- If the septic system remains down temporary restroom facilities should be provided until service is restored.

C.1.3. Water

The South Central Iowa Sanitary Landfill is served by rural water. Water is used for domestic purposes such as utility sinks and restrooms. Process water is <u>not</u> used in the operations of this sanitary landfill. Should service be disrupted, operations at the facility could go on without interruption.

Emergency Condition:

- Cold weather and lack of heat could cause water lines to freeze and possibly burst.
- On-site trenching operations could damage pipelines and interrupt service.

Response Action: The following steps should be implemented in an emergency condition.

- If waterline has burst or is leaking, shut off water immediately.
- Contact Landfill Manager.
- Absorb any water that has leaked into buildings with mops or other absorbent materials.
- If lack of heat is the cause of the leak, make sure that alternate heat sources (i.e. electrical space heaters) are not placed in water that has pooled on the floor.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Short-term (<48 hours)-Place alternate sources of heat in ideal locations within buildings to keep water pipes from freezing and the working environment tolerable.
- Long-term (>48 hours)- If the water supply is suspended for long periods of time bottled drinking water and temporary restroom facilities should be provided until service is restored.

C.1.4. Electricity

The South Central Iowa Sanitary Landfill draws overhead electricity to power the scalehouse, maintenance building, and leachate pumps.

Emergency Condition: In the event of a power outage:

- The scale and record keeping computer system would not function.
- The use of lights, machines and handheld motorized tools in the maintenance facilities would be suspended.
- Heating units would not operate.
- The leachate pumps would not operate.

Response Action: The following steps should be implemented immediately in an emergency condition.

- Contact the electric company (Mid American Energy 800-799-4443) to inform them of the situation.
- Contact Landfill Manager.
- Make sure all mechanical devices that were in use are in the "OFF" position and preferably disconnected from the power source until it is restored.
- Alternate sources of heat such as kerosene or gas space heaters should be used in the winter months to keep water pipes from freezing in onsite buildings and to provide tolerable working conditions.
- Check the level of leachate in the leachate storage lagoon to determine volume of storage left.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Short-term (<48 hours) - Using archived data and operator knowledge, estimate the weights of incoming loads and record. These estimates may be entered into the computer system once back online. Suspend maintenance activities that require electricity. Monitor the level of leachate in the leachate storage lagoons. If the leachate level in one of the lagoons appears to be nearing capacity the leachate conveyance network should be temporarily valved shut.
- Long-term (>48 hours) – Should electrical power remain off for more than 48 hours continue the short-term remedial actions. The leachate collection system should be returned to normal operations as quickly as possible. The Landfill Manager should evaluate the situation and pick the most economical solution. This could include temporarily running a generator(s) to power select operations until electrical power is restored. If one of the leachate storage lagoons is nearing capacity during a long-term outage, the leachate hauling contractor should be contacted to haul leachate to the other lagoon or for off-site treatment and disposal.

C.1.5. Telephone

Telephone service is not critical to the daily operations of the landfill. An emergency condition is not present with the loss of telephone service alone.

Emergency Condition:

- Emergency assistance (medical, fire, police, etc.) is necessary while telephone service is down.

Response Action: The following steps should be implemented immediately in an emergency condition.

- Various employees carry personal cellular phones that could be utilized to call the appropriate emergency service.
- Contact Landfill Manager.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Short-term (<48 hours) – Landfill personnel should notify the telephone company of the interruption of service as soon as is conveniently possible. Landfill staffs' personal cellular phones can be utilized for necessary phone calls until phone service has been restored.
- Long-term (>48 hours) – Continue the short-term remedial actions until phone service has been restored.

C.2. Evacuation procedures during emergency conditions

Working area or site evacuation may be required in the event of inclement weather, hazardous materials deposited in the working area or dumped elsewhere on the site, damage to the HHW satellite building, or large fires or explosions.

Response Action: The following steps should be implemented immediately in an emergency condition requiring evacuation.

- All personnel should be notified to evacuate.
- Personnel should cease operations, notify others on site of the evacuation, and immediately leave the area and assemble at the Emergency Assembly Point (front gate).
- The Landfill Manager shall notify local radio stations, haulers, and IDNR that the site is closed.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- The Landfill Manager or other safety personnel (fire department, HAZMAT personnel, etc.) shall determine when the site is clear for return.
- Once the evacuation has been lifted, all employees shall be notified and employees and others known to be on site when the evacuation was issued shall be accounted for.
- The Landfill Manager shall notify local radio stations, haulers, and IDNR that the site has been reopened.
- A visual survey of the landfill using the Emergency Checklist in Attachment A should be completed to determine what damage, if any, has occurred. Should other emergency situations exist such as loss of utilities, responses and remedial actions listed elsewhere in this plan should be followed.
- As operations resume, any waste not properly compacted or covered due to the evacuation order shall be properly disposed of in the working face.

C.3. Weather–related events

C.3.1. Tornado and wind events

According to the National Climatic Weather Center, the state of Iowa averaged 31-50 tornados a year from 1950-1999 putting it at moderate risk for tornadic activity. Damage during such an event is likely to be to overhead electrical systems, the scale house, maintenance facilities, and equipment. Active landfill disposal areas

are also susceptible to wind damage from blowing litter. Damage from intense wind events will most likely be similar to those experienced during a tornado and response activities are as discussed below.

Event Emergency Condition:

- A tornado warning has been issued for the area, including the South Central Iowa Sanitary Landfill.

Response Action: The following steps should be implemented immediately in an emergency condition.

- All personnel should be notified of the tornado warning and be instructed to cease operations and seek shelter. The restroom in the maintenance building is the designated tornado shelter for the facility.
- All other persons on site during the warning should be advised of the weather conditions. Personnel should offer direction to others on site to a sheltered area.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Once the warning has been lifted, all employees shall be notified and employees and others known to be on site when the warning was issued shall be accounted for.

Post-Event Emergency Condition:

- A tornado has touched down at the site or the site has experienced an intense wind event causing possible damage to onsite buildings, the leachate pumping system, the active landfill area, and equipment.

Response Action: The following steps should be implemented immediately in an emergency condition.

- If anyone has been injured medical attention should be sought immediately and the person removed from risk of further injury if possible. Insure that other personnel are not at risk of being injured.
- All employees and other known persons onsite shall be accounted for once the threat of danger has passed.
- A visual survey of the landfill should be completed using the Emergency Checklist in Attachment A to determine what damage, if any, has occurred. Should other emergency situations exist such as loss of utilities, responses and remedial actions listed elsewhere in this plan should be followed.
- Inspect the HHW satellite building. If a spill has occurred, contact the RCC. Use caution when determining the extent of damage to the HHM satellite building. Spilled materials may pose a serious hazard. If unsure of the type(s) or amounts of materials spilled contact HAZMAT and/or the RCC. Direct all HHM to the RCC - the HHM building should not be used until hazardous materials that may have been displaced are properly managed.
- Wastes caught by litter fences should be removed as soon as practical to maintain the efficiency of the fencing and reduce the potential for damage to the fences.

- Document any damage with notes and/or photographs for insurance purposes.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Short-term (<48 hours) – Should the following facilities incur damage:
  Scale House - Operations could continue using makeshift facilities whether this is a usable portion of the existing building or a portable unit. Suspend activities in any portion of the building that is damaged until repairs can be made. Turn off electrical power to any damaged areas until it has been verified that the electrical system is safe for use. Estimation of the weights of the incoming loads could be made with the use of archived data and operator knowledge. These estimates may be entered into the computer system once back online.
  Maintenance Building - Suspend maintenance activities in any portion of the building that is damaged until repairs can be made. Turn off electrical power to any damaged areas until it has been verified that the electrical system is safe for use.
  HHM Satellite Building - Direct all HHM to the RCC until the HHM satellite building is determined to be useable.
- Leachate Storage Lagoons - Monitor the level of the leachate storage lagoons. If the leachate levels in one of the lagoons appears to be nearing capacity, temporarily close valves to stop leachate flows. If conditions warrant the leachate hauling contractor should be contacted to haul leachate to the other lagoon or for off-site treatment and disposal.
  Active Landfill Disposal Areas – Waste that has blown away from the working area shall be gathered and returned to the active area as soon as practical. This includes waste that has blown offsite onto adjacent properties.
- Long-term (>48 hours) – All damaged facilities shall be permanently repaired as soon as possible. Until this is accomplished, the short-term remedial actions shall be followed.

C.3.2. Snow and Ice

Snow and ice accumulations are common during a typical Iowa winter. If landfill roads are impassable or working conditions become dangerous for customers and/or landfill employees during a snow and ice event, the Landfill Manager has the option to temporarily close the site until the dangerous snow and/or ice conditions pass. In the event of a site closure, the Landfill Manager will contact haulers, local media, and other affected customers and notify them that the landfill will be temporarily closed due to the hazardous weather conditions. The majority of damage during a snow and/or ice event is likely to be to site roads making access to the site difficult. Active landfill disposal areas are also susceptible to wind damage from blowing litter.

Event Emergency Condition:

- A blizzard warning, heavy snow warning, or ice storm warning has been issued for the area, including the South Central Iowa Sanitary Landfill.

Response Action: The following steps should be implemented immediately in an emergency condition.

- An announcement shall be made over the landfill radio system warning employees of the weather condition and instructing them to return to the scale house.
- All other persons on site during the warning will be advised of the weather conditions. Personnel should offer direction to others on site to a sheltered area.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Once the warning has been lifted, all employees shall be notified and employees and others known to be on site when the warning was issued shall be accounted for.

Post-Event Emergency Condition:

- A severe winter storm has hit the South Central Iowa Sanitary Landfill causing the facility to temporarily close.

Response Action: The following steps should be implemented immediately in an emergency condition.

- If anyone has been injured medical attention should be sought immediately and the person removed from risk of further injury if possible. Insure that other personnel are not at risk of being injured.
- All employees and other known persons onsite shall be accounted for once the threat of danger has passed.
- The Landfill Manager shall notify local haulers and media that the site is temporarily closed.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Short-term (<48 hours) –
  - A visual survey of the landfill should be completed using the Emergency Checklist in Attachment A to determine what damage, if any, has occurred. Should other emergency situations exist such as loss of utilities, responses and remedial actions listed elsewhere in this plan should be followed.
  - Once it is appropriate to do so, the Landfill Manager shall notify local haulers and media that the site has reopened.
  - Wastes caught by litter fences should be removed as soon as practical to maintain the efficiency of the fencing and reduce the potential for damage to the fences.
  - Document any damage with notes and/or photographs for insurance purposes.
- Long-term (>48 hours) – Damaged facilities shall be permanently repaired as soon as is possible. Until this is accomplished, the short-term remedial actions shall be followed.

C.3.3. Intense Rainstorms, mud, and erosion

The South Central Iowa Sanitary Landfill operates under a comprehensive storm water management plan and National Pollutant Discharge Elimination System

(NPDES) General Permit (GP) No. 1. Stormwater is diverted through various systems to slow water velocity, keep sediment on site, and reduce further erosion. A Stormwater Pollution Prevention Plan (SPPP) was developed for the site in conjunction with the initial NPDES GP No. 1 application. HHM is stored inside the HHM satellite building protecting the materials from precipitation events as well as surface water. The working area is over ¼ mile from the landfill entrance on State Highway 92 so mud at the landfill entrance is generally not an issue. Mud is removed from site roads to insure safe driving conditions. Landfill staff inspect the site frequently and make repairs to erosion issues as conditions allow. If internal roads are damaged by intense rainstorms, mud, or erosion landfill equipment should be used to maintain access to the facility.

C.3.4. Lightning strikes

Damaging lightning strikes could cause failure of utilities, fires within the waste, or injuries to personnel. See Section C.1. (Failure of Utilities) and Section C.4. (Fire and Explosions) for emergency, response, and remedial actions.

C.3.5. Flooding

Flooding is not a significant risk for the South Central Iowa Sanitary Landfill. No portions of the property utilized for landfilling or borrow operations are within 100-year floodplain boundaries. In the event of localized flooding at the site, never attempt to drive through a flooded area or standing water.

C.3.6. Event and postevent conditions

Event and postevent conditions are discussed as applicable under the individual discussion items in this ERRAP.

C.4. Fire and explosions.

C.4.1. Waste materials

Emergency Condition:

- There is potential for waste materials on site to catch fire.

Response Action: The following steps should be implemented immediately in an emergency condition.

- If there is risk of danger, personnel should remove themselves from the area immediately.
- Upon discovery of a fire, the area immediately around the fire shall be secured to limit access.
- Evacuate all staff and customers and direct them to a safe area.
- Determine the type of material that is burning and whether it can be safely extinguished with a hand held extinguisher.
- Evaluate the situation and if material cannot be contained/controlled, call 911.
- Materials on fire should be immediately isolated from other material susceptible to fire, if possible, using heavy equipment.
- The isolated materials should be placed on a soil base and covered with soil to reduce the possibility of the spread of fire to other waste.

Remedial Action: Once the material is no longer burning and the threat of re-ignition has passed, it can be placed in the active face of the landfill.

C.4.2. Buildings and site

All buildings onsite were constructed out of fire resistant materials. The steel-framed shells are placed on concrete slabs and have metal roofs. Chemical extinguishers are placed throughout the buildings in the event of a fire. All staff should be aware of the locations and operation of the extinguishers.

Emergency Condition:

- A fire or explosion has occurred within an onsite building.

Response Action: The following steps should be implemented immediately in an emergency condition.

- If anyone has incurred injuries, medical attention should be sought immediately and the person removed from risk of further injury if possible.
- Isolate the area of the building that is the source of the emergency condition, if possible. Personnel should not put themselves in danger.
- Evaluate the situation and call 911 if necessary.
- If there is risk of danger, personnel should remove themselves from the area. Chemical extinguishers can be used to put out or control flames until other methods of control arrive at the site.

Remedial Action: Keep the building isolated until the risk of further fire and explosion has been removed.

C.4.3. Equipment

Emergency Condition:

- A fire or explosion has occurred within a piece of equipment.

Response Action: The following steps should be implemented immediately in an emergency condition.

- If there is risk of danger, personnel should remove themselves from the area immediately.
- If anyone has incurred injuries, medical attention should be sought immediately and the person removed from risk of further injury if possible.
- Isolate the equipment that is the source of the emergency condition, if possible. Personnel should not put themselves in danger.
- Evaluate the situation and call 911 if necessary.
- Chemical extinguishers can be used to put out or control flames until other methods of control arrive at the site.

Remedial Action: Keep the equipment isolated from waste and other flammable sources, until the risk of further fire and explosion has been removed.

C.4.4. Fuels

The South Central Iowa Sanitary Landfill does keep fuel storage vessels onsite for refueling of earth moving equipment. The landfill operates under a Spill Prevention, Control, and Countermeasures Plan (SPCC) for petroleum products stored on site.

Precautions: The following precautions should be taken around fuels.

- Post no smoking signs and enforce a ban on smoking and open flames near fuel storage areas.
- Shut down all equipment while fueling.

- Monitor the fueling process at all times.
- Be sure pumps and tanks are properly grounded.

Emergency Condition:

- A storage vessel has caught fire or exploded.

Response Action: The following steps should be implemented immediately in an emergency condition.

- If there is risk of danger, personnel should remove themselves from the area immediately.
- If anyone has incurred injuries, medical attention should be sought immediately and the person removed from risk of further injury if possible.
- Isolate the vessel that is the source of the emergency condition, if possible. Personnel should not put themselves in danger.
- Evaluate the situation and call 911 if necessary.
- Chemical extinguishers can be used to put out or control flames until other methods of control can be brought to the site.

Remedial Action: Keep the vessel isolated from waste and other flammable sources, until the risk of further fire and explosion has been lifted.

C.4.5. Utilities

Due to the nature of most of the utilities the risk for fire or explosion is minimal. The propane storage vessel is the only utility with a realistic potential for fire or explosion.

Emergency Condition:

- The propane storage vessel has caught fire or exploded.

Response Action: The following steps should be implemented immediately in an emergency condition.

- If there is risk of danger, personnel should remove themselves from the area immediately.
- If anyone has incurred injuries, medical attention should be sought immediately and the person removed from risk of further injury if possible.
- Isolate the tank, which includes shutting valves to all service lines, if possible.
- Evaluate the situation and call 911 if necessary.
- Contact Landfill Manager.
- Contact the propane service provider.
- Alternate sources of heat such as electrical or kerosene space heaters may be used in the winter months to keep water pipes from freezing in onsite buildings and the working environment tolerable.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Short-term (<48 hours)-Place alternate sources of heat in ideal locations within buildings to keep water pipes from freezing and the working environment tolerable.

- Long-term (>48 hours)-Continue to use alternate sources of heat until propane service is restored or another permanent source of heat is provided.

C.4.6. Facilities

There are no facilities on site outside of site buildings. Fire and explosions at site buildings are discussed in Section C.4.2 above.

C.4.7. Working area

Emergency Condition:

- There is potential for waste materials at the working area to catch fire.

Response Action: The following steps should be implemented immediately in an emergency condition.

- If there is risk of danger, personnel should remove themselves from the area immediately.
- Materials on fire should be immediately isolated from the working area using heavy equipment.
- The isolated materials should be placed on a soil base and covered with soil to reduce the possibility of the spread of fire to other waste.
- Chemical extinguishers may be used at staffs discretion to put out any flames, glowing embers, or smoldering material.

Remedial Action: Once the material is no longer burning and the threat of re-ignition has passed, it can be moved back to the working area of the landfill.

C.4.8. Hot loads

Emergency Condition:

- Occasionally a 'hot' load will be dumped in the landfill causing a threat of fire to the waste materials already placed.

Response Action: The following steps should be implemented immediately in an emergency condition.

- A suspected hot load should be immediately isolated from other wastes susceptible to fire using heavy equipment.
- The isolated materials should be placed on a soil base and covered with soil to reduce the possibility of the spread of fire to other waste.
- Chemical extinguishers may be used at staffs discretion to put out any flames, glowing embers, or smoldering material.

Remedial Action: Once the material is no longer burning and the threat of re-ignition has passed, it can be placed in the active face of the landfill.

C.4.9. Waste gases

Volatile gases are slowly created from the degradation of the wastes disposed of in the landfill and slowly released through the daily/intermediate/final cover. If gasses are confined within the waste mass, pressure builds, and an ignition source is present, the gases could ignite. At the South Central Iowa Sanitary Landfill this could occur in two primary ways; gases could become trapped in pockets within the landfill, or gases could migrate and become concentrated within onsite buildings.

Emergency Condition:

- Waste gases within the landfill catch fire.

Response Action: The following steps should be implemented immediately in an emergency condition.

- If there is risk of danger, personnel should remove themselves from the area immediately.
- If anyone has incurred injuries, medical attention should be sought immediately and the person removed from risk of further injury if possible.
- Contact Landfill Manager.
- Evaluate the situation and call 911 if necessary.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Short-term (<48 hours) – Investigate looking for sources of concentrated landfill gas within the landfill. Once the source(s) are found use onsite resources to remove the source(s) by isolation, venting, or flaring.
- Long-term (>48 hours)- Continue short term actions listed above to limit potentially harmful gas concentrations.

Gases trapped within Buildings: Onsite buildings could trap gases seeping out of the landfill creating a risk for fire or explosion when exposed to an ignition source. Methane, oxygen, carbon monoxide, and hydrogen sulfide are monitored for on a quarterly basis. Gas levels are taken at several locations including the interior of onsite buildings, at property lines, and at subsurface gas probes. Quarterly testing has been performed since at least 1994 showing levels of methane at all testing locations to be below actionable levels.

Emergency Condition:

- Quarterly monitoring of gases indicate elevated levels of explosive gases within or around onsite buildings.
- There is a fire or explosion within one of the onsite buildings

Response Action: The following steps should be implemented immediately in an emergency condition.

- If there is risk of danger, personnel should remove themselves from the area immediately.
- If anyone has incurred injuries, medical attention should be sought immediately and the person removed from risk of further injury if possible.
- Remove personnel from the affected building and call 911.
- Contact the Landfill Manager.
- Ventilate affected buildings by opening doors, windows and any other vent that will circulate air in the building.

Remedial Action: The following actions should be implemented once the initial response has been completed and emergency conditions no longer exist.

- Short-term (<48 hours) - Gases should be monitored daily in all buildings. Sources of gas in the building or building vicinity should be identified and eliminated.
- Long-term (>48 hours) –The source of the explosive gases should be identified before construction begins so as to not put workers at risk or build directly over the source. If the source is not found the building

should be relocated or should be built with a permanent ventilation system.

C.4.10. Explosive devices

Emergency Condition:

- An explosive device or suspicious material is noted on the landfill property.

Response Action: The following steps should be implemented immediately in an emergency condition.

- If there is an explosive device or suspicious materials noted, personnel should remove themselves from the area immediately.
- If anyone has incurred injuries, medical attention should be sought immediately and the person removed from risk of further injury if possible.
- The site should be evacuated following the procedures in Section C.2, Evacuation.
- Call 911.
- Contact Landfill Manager.

Remedial Action: Normal site operations can resume after the site is determined to be safe by law enforcement personnel.

C.5. Regulated waste spills and releases

C.5.1. Waste materials

Solid waste is placed at the working face throughout the day. Once placed on the working face materials are compacted. Daily cover is placed over the working area at the end of each working day. Wastes could be released from the site if they become airborne during unloading or are blown from the working face during compaction. Litter fences are used to limit the movement of windblown litter. Collection of windblown litter occurs onsite and on adjacent properties as necessary.

C.5.2. Leachate

Leachate is collected at the South Central Iowa Sanitary Landfill through a piping collection network and in leachate extraction wells that discharges to two (2) Subtitle D composite lined leachate storage lagoons. The east leachate storage lagoon has a storage capacity of approximately 1,005,700 gallons, the west leachate storage lagoon has a storage capacity of approximately 651,100 gallons. Leachate is typically recirculated within the waste mass. The landfill also has an agreement with a leachate hauling contractor for leachate hauling to the Des Moines WRA for treatment, and disposal. Spills or releases could potentially occur in four ways; leachate through the leachate storage lagoon liner, perched leachate seeps, leakage through the landfill liner, and leakage outside of the solid waste boundary from the leachate collection system.

Leachate Storage Lagoon Liner Penetration: It is highly unlikely but conceivable that a leak occurs through the liner of the leachate storage lagoons. The South Central Iowa Sanitary Landfill has perimeter monitoring points downgradient of the storage lagoons that are monitored on a regular basis. Should contamination be found in one of these points during regular monitoring, the IDNR

will be notified and a Site Remedial Action and Mitigation Plan (SRAMP) and Groundwater Quality Assessment Plan (GQAP) completed if necessary.

Perched Leachate Seeps: Leachate can perch above compacted lifts whose permeability does not allow for downward migration to the leachate collection system. The leachate may then travel horizontally as opposed to vertically, and can seep from the side slopes of the landfill. These types of leaks are normally slow and can be detected during site operations. These types of leaks should be repaired as soon as possible by landfill staff in such a manner that the leachate is directed to the lower layers of waste and collected by the leachate collection system.

Landfill Liner Penetration: It is highly unlikely but conceivable that a leak occurs through the liner of the landfill. The South Central Iowa Sanitary Landfill has a series of perimeter monitoring wells downgradient of the waste areas that are monitored on a regular basis. Should contamination be found in these wells during regular monitoring, the IDNR will be notified and a Site Remedial Action and Mitigation Plan (SRAMP) and Groundwater Quality Assessment Plan (GQAP) completed if necessary.

Leachate Collection and Conveyance System: Components include the network of collection piping, extraction wells, conveyance piping, and leachate storage lagoons. Leachate collection has been installed on the west perimeter of the original landfilling area and leachate extraction wells have been installed with the original landfilling area. Leachate collection piping is also installed in conjunction with the Subtitle D liner system. The South Central Iowa Sanitary Landfill has a series of perimeter monitoring wells downgradient of the leachate collection and conveyance system that are monitored on a regular basis. Should contamination be found in these wells during regular monitoring, the IDNR will be notified and a Site Remedial Action and Mitigation Plan (SRAMP) and Groundwater Quality Assessment Plan (GQAP) completed if necessary.

C.5.3. Waste gases

As per IDNR regulations, methane concentrations are monitored on a quarterly basis. Gas levels are taken at several locations including the interior of onsite buildings, at property lines, and at subsurface gas probes. Quarterly testing has been done since at least 1994 showing levels of methane at all testing locations to be below actionable levels.

C.5.4. Waste stockpiles and storage facilities

The SCILA collects, separates, and stores tires, white goods, scrap metal, and household hazardous materials.

Waste Tires: Tires delivered to the landfill are stored in a trailer and removed by a recycler when quantities warrant.

White Goods: White goods accepted at the landfill are stored upright in the designated area on a compacted clay base with limestone surfacing. White goods are typically removed by the recycler when quantities warrant. The storage of white goods is not, in itself, considered to be threatening to the environment; however, these wastes may contain pressurized PCB's, mercury switches, and refrigerants that, if compromised, could contribute to a hazardous release. Section C.6 of this plan should be followed in the unlikely event that a release should occur.

Scrap Metal: Scrap metal is stored onsite in a designated area that has a compacted clay base with limestone surfacing. Scrap metal is removed by a recycler when quantities warrant.

Household Hazardous Materials: Household hazardous materials (HHM) are accepted and stored at the South Central Iowa Sanitary Landfill in a statically vented, self-contained unit. HHM material is removed from the site and processed by the Regional Collection Center (RCC) in Bondurant, Iowa. Operations Plans and Emergency Preparedness Plans for the collection of HHM has been prepared and submitted to IDNR by the RCC. Staff should familiarize themselves with these plans.

C.5.5. Waste transport systems

The SCILA does not operate any waste transport systems. Wastes are brought to the facility by private waste haulers and other private parties.

C.5.6. Litter and airborne particulates

Wastes are inherently susceptible to wind that can spread the debris offsite. Perimeter fences aid in the collection of airborne materials. Wastes that are blown away from the active area are retrieved as necessary.

C.5.7. Site drainage systems

Three types of regulated materials could potentially be released into the drainage systems at the South Central Iowa Sanitary Landfill, leachate, sediment, and blowing litter. Leachate is addressed in Section C.5.2, sediment in Section C.3.3, and blowing litter in Section C.5.6.

C.5.8. Off–site releases

The South Central Iowa Sanitary Landfill has perimeter monitoring wells downgradient of the waste areas that are monitored in accordance with the IDNR approved monitoring plan. Should contamination be found in these wells during regular monitoring, the IDNR will be notified and a Site Remedial Action and Mitigation Plan (SRAMP) and Groundwater Quality Assessment Plan (GQAP) completed if necessary.

C.6. Hazardous material spills and releases

C.6.1. Load check control points

The South Central Iowa Sanitary Landfill does not accept hazardous materials for disposal at the working face. Waste is unloaded only when a certified operator is on duty; therefore; personnel can visually monitor loads going into the active face for signs of hazardous material or other banned substances. It is the responsibility of the hauler to retrieve any hazardous material found at the working face and properly dispose of not only the hazardous material, but any other waste that may have been contaminated by the hazardous material.

C.6.2. Mixed waste deliveries

If hazardous material is noted in any load prior to unloading, the whole load will be rejected. The hauler will have the responsibility for disposal of any load containing hazardous material.

C.6.3. Fuels

The South Central Iowa Sanitary Landfill stores various fuels and petroleum products for use in the daily operations. The site has a Spill Prevention, Control,

and Countermeasures Plan (SPCC) detailing the storage of petroleum products on site as well as response actions to any spill or release. Diesel fuel, hydraulic fluid, oil, and anti-freeze are stored on site.

Emergency Condition: The spill of petroleum products will require immediate action to prevent further spillage and ensure that any existing containment areas are secured, if possible, to prevent a discharge.

A spill is defined as "a discharge, including but not limited to any spilling, leaking, pumping, pouring, emitting, emptying, or dumping" and means any situation which involves the "actual, imminent or probable spillage, leakage or release of a hazardous substance" into or onto navigable waters.

Response Action: The Landfill Manager should immediately be notified to coordinate the actions to be taken. The SPCC should be consulted for recommended actions. The following steps should be undertaken immediately:

- Isolate the source of the spill to minimize the magnitude of the spill itself.
- Whenever specific conditions, including adverse weather, will result in a situation where the normal containment methods and cleanup actions will not be adequate, mobilize additional personnel and equipment. If necessary, use dirt, sand, or other adsorptive materials to prevent the flow of spilled materials and ensure confinement.
- Take all necessary steps to protect all personnel and equipment from fire hazards. Remove all sources of ignition from spill area.
- Take all necessary steps to protect all personnel from direct or indirect contact with spilled materials. Utilize protective clothing as necessary.

Remedial Action: Following completion of the Response Actions, the Landfill Manager and site personnel should proceed with the following:

- Notify the applicable regulatory agencies as required by IDNR and EPA regulations included in Attachment B.
- Maintain the necessary precautions to ensure the safety of personnel and equipment from fire and health hazards.
- Contact outside authorities as necessary for assistance.

C.6.4. Waste gases

Waste gases are not collected at the South Central Iowa Sanitary Landfill therefore their release is not considered to be hazardous unless regular monitoring detects hazardous concentrations.

C.6.5. Site drainage systems

Spills or releases of hazardous substances are not likely to get into onsite drainage systems. Spills at the active area will be contained within soils or wastes until proper removal can be undertaken.

C.6.6. Off–site releases

The South Central Iowa Sanitary Landfill does not store or have any hazardous substances onsite in significant quantities such that a spill or release could potentially migrate offsite. The small quantities of household hazardous materials stored on site are stored in designated building with self-contained fire suppression capabilities and secondary spill containment.

C.7. Mass movement of land and waste

C.7.1. Earthquakes

The South Central Iowa Sanitary Landfill is at a very limited risk for an emergency condition due to damage caused by seismic events. Madison County lies in the "Lowest Hazard" for earthquake activity according toe the USGS. In the unlikely event of an earthquake that damages landfill facilities follow the response actions for the applicable situation (Failure of Utilities, Fire, Waste Spills and Releases, etc.) listed elsewhere in this ERRAP.

C.7.2. Slope failure

Due to regulatory requirements, slope failures are not likely to occur at this type of landfill facility. To comply with state regulations, liner slopes must be designed with a maximum 3:1 grade and the leachate drained to reduce the risk of failure. Cap slopes must be designed with a maximum 4:1 grade. The areas with the highest risk of failure at the South Central Iowa Sanitary Landfill would be side slopes of the final cover of the closed original landfilling area/vertical expansion area and the side slopes of the active area. A stair-step method is typically used to place the fill. This greatly reduces the risk of slope failure at the active face. In the unlikely event that a slope failure were to occur, waste could be exposed and/or leachate could migrate from the waste. Leachate would need to be contained and the slope repaired as soon as possible, with any waste that left the solid waste boundary recovered and placed in the active area.

C.7.3. and C.7.4. Waste shifts and waste subsidence

Waste shifts and subsidence are inherent at a landfill facility. As the solid waste decomposes and settles in closed cells, depressions may be created on the surface of the cap. Settlement occurs over a period of time and will not create an emergency condition. Depressions should be repaired as soon as practical to limit the potential for surface water to pond and infiltrate into the waste mass. If any area of settlement or subsidence is noted, infrastructure in the vicinity of the movement, such as leachate monitoring wells, should be monitored for damage.

C.8. Emergency and release notifications and reporting

C.8.1. Federal Agencies

See Attachment C.

Federal notification requirements and procedures are discussed in Section C.8.6 below.

C.8.2. State Agencies

See Attachment C.

The IDNR notification requirements and procedures are included in Attachment B.

C.8.3. County and city agencies

See Attachment C.

C.8.4. News media

See Attachment C.

C.8.5. Public and private facilities with special populations within five miles

The entire City of Winterset is within a 5 mile radius of the landfill. It is not feasible for landfill staff to contact all of the special populations within a 5 mile radius, the Winterset Police Department and the Madison County Sheriff's Office will be relied on for notifications if required. The special populations within this 5 mile radius are listed below:

- In the event of an emergency, the Madison County Sheriff's Office and Winterset Police Department will be notified to aid in the notification of special populations within a 5 miles radius of the landfill.
- Madison County Memorial Hospital, (515)462-2373.
- Winterset School District. A number of schools and other district facilities are within 5 miles of the facility. In the event of an emergency, the School District Administrative Office (515-462-2718) will be notified, if necessary.
- Daycares, preschools, nursing homes, etc. Due to the number of these facilities in Winterset, and an unknown number of unregistered home daycares, landfill personnel contacting these facilities in the event of an emergency is not practical. The Winterset Police Department and the Madison County Sheriff's Office will be relied upon for notification of these facilities in the event of an emergency, if necessary.

C.8.6. Reporting requirements and forms

Depending on the nature of the material, spills must be reported to the U.S. EPA and/or IDNR.

U.S.EPA

US EPA reporting requirements are included in Attachment C. Reporting is required to U.S. EPA for the following:

- An oil spill that reaches a navigable water of the United States or adjoining shorelines.
- A spill of a hazardous substance. Reporting requirements vary depending on the type and quantity of hazardous substance spilled.

To ensure compliance with Federal requirements, report oil spills that reach navigable waters or adjoining shorelines and all hazardous substance spills to the National Response Center (NRC) at 1-800-424-8802. The NRC can then determine if additional information/response is needed. When calling the NRC have the following information ready:

a) Your name, location, and phone number

b) Name and address of the party responsible for the incident if known
c) Date and time of the incident
d) Location of the incident
e) Source and cause of the release or spill
f) Types of material(s) released or spilled
g) Quantity of materials released or spilled
h) Land or water affected by release or spill
i) Danger or threat posed by the release or spill
j) Number and types of injuries (if any)
k) Weather conditions at the location
l) Whether an evacuation has occurred
m) Other agencies notified or about to be notified
n) Any other information that may help emergency personnel respond to the incident

IDNR

The IDNR notification requirements and procedures are included in Attachment A.

C.9. Emergency waste management procedures

C.9.1. Communications

Personnel carry personal cell phones which can be used in the event of an emergency.

C.9.2. Temporary discontinuation of services

Short Term (< 48 hours): In the event that the landfill would have to cease operations and acceptance of wastes for less than 48 hours, wastes would be stored at the source until routine service could continue.

Long Term (>48 hours): Wastes would have to be stored at the source or hauled to other landfill facilities until service could continue. In this event the open face should be compacted and covered until operations resume.

C.9.3. Facilities access and rerouting

There is only one permanent access point to the landfill. If an alternate access is required, landfill equipment and personnel can be used to construct a temporary access to the site. Due to the availability of earth moving equipment on site, internal haul roads can be rerouted if necessary, with little reduction in service at the active area.

C.9.4. Waste acceptance

In the event of a temporary discontinuation of services at the site, IDNR will be notified, and waste will be redirected to other facilities for disposal.

C.9.5. Wastes in process

Typically, the only waste in process on site is the waste being landfilled at the working face. The only scenario under which waste in process would not be deposited at the working face and compacted would be if there is danger from weather, fire, hazardous waste, etc. and the working face is evacuated. In this case, the waste will be incorporated into the working face, compacted, and covered as soon as it is safe for personnel to return to the working face.

C.10. Primary emergency equipment inventory

C.10.1. Major equipment

The SCILA owns the following equipment that could be used in an emergency condition if needed:

- Landfill Compactor
- Bulldozer
- Track loader
- Excavator
- Articulated haul truck
- Motor grader
- Tractor
- Miscellaneous smaller maintenance equipment

C.10.2. Fire hydrants and water sources

Sediment basins are located on site and can be used as a source of water if weather conditions allow. Fire extinguishers are located in all buildings and equipment. Water at low volumes is available in the scalehouse and the maintenance building.

C.10.3. Off–site equipment resources

Machinery can be rented from local equipment vendors if needed.

C.11. Emergency aid

C.11.1. Responder contacts

For all emergencies, call 911. The 911 dispatcher will contact and direct all emergency services needed, including police, fire, and medical personnel.

C.11.2. Medical services

Fire Department
911

Madison County Sheriff
911

Madison County Memorial Hospital
300 Hutchings Street
Winterset, Iowa 50273
(515)462-2373

The Madison County Memorial Hospital is located in Winterset approximately 4 miles southwest of the landfill. To get to the Madison County Memorial Hospital from the South Central Iowa Sanitary Landfill, turn left (west) on Highway 92 to North 1st Street. Turn left (south) on North 1st Street to West Summit Street. Turn right (west) on West Summit Street to 3rd Avenue. Turn left (south) on 3rd Avenue to hospital.

C.11.3. Contracts and agreements

Arrangements have been made with the following fire departments to respond to emergency situations at the landfill:

- Winterset, 911

C.12. ERRAP training requirements

C.12.1. Training providers

This document will serve as the training guide for emergency response and remedial action. Emergency preparedness will be discussed at the site as warranted. A review of this document will occur after any emergency condition has occurred. The procedures contained within will be reviewed and modified as necessary.

C.12.2. Employee orientation

As part of orientation a new employee will be required to sign a certificate of verification that they have fully read and understand this document.

C.12.3. Annual training updates

Emergency preparedness will be discussed at the site as warranted, but not less than annually at a minimum.

C.12.4. Training completion and record keeping

Documentation on training updates will be kept as part of the personnel files located in the scalehouse.

ATTACHMENT A

Emergency Checklist

Recommended for use following each emergency or disaster event

- Does the situation require evacuation?

- Are all personnel, customers, and visitors accounted for?

- Are there any injuries?
  - If necessary call 911 for assistance

- Are there other conditions that require emergency assistance? If so, call 911

- Site review
  - Are buildings safe and secure?
  - Is there danger of fire?
  - Have fuels been spilled?
  - Are any actions required to minimize a spill, fire, or release of regulated or hazardous materials?

- Are there dangerous areas? Do they need to be cordoned off?

- Utility review
  - Have any utilities been damaged? If so, evacuate building(s) and/or area(s) if necessary and contact respective utility.
  - Arrange for alternate work locations/methods until utilities are repaired.

- Is the facility secure?
  - Is there exposed waste?
  - Are slopes stable?
  - Are the leachate collection and pumping systems operational?
  - Are the access roads in good condition?
  - Are fences and gates intact?

- Machinery review
  - Has any machinery been damaged? If so, contact applicable repair service.
  - Arrange for alternate machinery if needed until repairs are completed.

- Have photos been taken for documentation?

- Has the insurance company been notified?

ATTACHMENT B

DON'T HESITATE. DON'T FORGET. DON'T WAIT
UPDATE EMERGENCY RESPONSE PLANS NOW

DNR'S 24/7 ENVIRONMENTAL EMERGENCY HOTLINE NUMBER CHANGES JULY 1.

Don't wait until you or your company need to report a spill, wastewater bypass, underground storage tank system release or failure, or water supply failure or violation to the DNR. Please change the environmental hotline number on your emergency plans and documents now. The new number is 515-725-8694.

WHO NEEDS TO CALL?

Contact the Iowa Department of Natural Resources for any of the following situations as soon as possible but no later than required by law. The sooner you contact DNR staff, the more likely they can help you prevent additional risk to public health and safety, or damage to Iowa's natural resources.

Changing July 1, 2015

DNR's 24-hour Environmental Hotline

515-725-8694

Emergency Situations that Must be Reported	Time Limit to Report
Chemical spills: Anyone manufacturing, storing, handling, transporting or disposing of a hazardous substance when a hazardous condition occurs. If in doubt, report it.	Within 6 hours
Manure releases: Anyone storing, handling, transporting or land-applying manure from a confinement feeding operation; or storing, handling, transporting or land-applying manure, process wastewater, open feedlot effluent, settled open feedlot effluent or settleable solids from an open feedlot operation who becomes aware of a release.	Within 6 hours
Wastewater discharges: Treatment facility owner or operators. Report when a bypass or upset occurs as a result of mechanical failure or acts beyond the control of the owner or operator.	Within 24 hours
Underground storage tank system failures: Owners and operators of UST systems must report to DNR within 24 hours the discovery of released regulated substances at the UST site or in the surrounding area, unusual operating conditions or monitoring results from a release detection method that indicate a release may have occurred.	Within 24 hours (6 hours if release creates a hazardous condition)
Drinking water system notifications: Owners and operators of public drinking water systems must report monitoring and maximum contaminant level (MCL) violations and situations, including treatment or distribution system failure that "significantly increases the potential for drinking water contamination" and other situations "with significant potential to have serious adverse effects on human health as a result of short-term exposure."	Within 24 hours
Complaints, Fish Kills and other environmental reporting: Anyone seeing a fish kill, someone burning tires or other banned materials, or dumping materials where it shouldn't belong.	As Soon As Possible

Don't wait until you're setting out the booms. Change to 515-725-8694 on all your plans now.

More About Spill Reporting

Spills must be reported by anyone manufacturing, storing, handling, transporting or disposing of a **hazardous substance** when a **hazardous condition** occurs. (Also see definitions.)

How do I know if it's a hazardous condition?

Report it if a hazardous substance such as an acid, heavy metal, paint is involved and it has the potential to leave the property, reach a water of the state (surface or groundwater) or can be detected in the air at the facility's boundaries.

Report it if there is a potential threat to public health and safety, or first responders (fire department, Haz Mat, public health and emergency management) respond to the incident. Report releases that exceed a Federal Reportable Quantity to the National Response Center or to the U.S. Environmental Protection Agency.

Definitions

"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 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 substance 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).

Additional Information

Contact the Iowa DNR's main office at 515-725-8200. Or contact the environmental field office serving your area at: **https://www.iowadnr.gov/Portals/idnr/uploads/fo/2019 Field Office brochure.pdf**

Clip and keep.

Required Time Limits for Reporting Incidents

Spill Reporting	6 hours
Manure Release Reporting	6 hours
Waste Water Bypasses	24 hours
Drinking Water (main breaks, violations, etc)	24 hours
Release from a UST system	24 hours
(if release creates a hazardous condition)	6 hours

Emergency Numbers

DNR 24/7 Spill Number: 515-725-8694

Local Law Enforcement: _____

Local Fire Dept: _____

Other: _____

_____

_____

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL SERVICES DIVISION
FIELD SERVICES & COMPLIANCE BUREAU

Iowa Administrative Code Chapter 131
Notification of Hazardous Conditions

24 hour number for release reporting
515/725-8694

Summary of Key Points and Definitions

Definitions

"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 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 substance 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)

Key Points

Who is Required to Report Hazardous Conditions. Any person manufacturing, storing, handling, transporting, or disposing of a hazardous substance shall notify the department at (515) 725-8694 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 the 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).

Reporting Subsequent Findings. All subsequent finding and laboratory results should be reported and submitted in writing to the department as soon as they become available.

Reminder ~ VERBAL REPORTS ARE REQUIRED WITHIN 6 HOURS OF INCIDENCE OCCURRENCE OR DISCOVERY.

REV. 5/2024

IOWA DNR EMERGENCY RESPONSE UNIT
6200 Park Avenue, Ste 200 / DES MOINES, IOWA 50321
515-725-8694 TDD 515-242-5967 www.iowadnr.gov

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL SERVICES DIVISION
FIELD SERVICES & COMPLIANCE BUREAU

Guidelines for Reporting Hazardous Conditions
Verbal Reporting

24 hour number for release reporting
515/725-8694

Report the Condition if:

- ☐ The hazardous substance has the potential to leave the property by run-off, sewers, tile lines, culverts, drains, utility lines, or some other conduit, or,
- ☐ The hazardous substance has the potential to reach a water of the state – either surface water or groundwater or,
- ☐ The hazardous substance can be detected in the air at the boundaries of the facility property by the senses (sight and smell) or by monitoring equipment or,
- ☐ There is a potential threat to the public health and safety or,
- ☐ Local officials (Fire department, law enforcement, Hazmat, public health, and emergency management) respond to the incident or,
- ☐ The release exceeds a Federal Reportable Quantity (RQ).

~ If in Doubt, Report It ~

IDNR REQUIRES VERBAL REPORTS WITHIN 6 HOURS OF INCIDENCE OCCURRENCE OR DISCOVERY

- It is recommended that all spills be cleaned up although a particular spill may not be reportable. A series of small spills over time can result in one big cleanup.
- Department rules stress the immediate or potential danger that a spill may cause.
- A written report of the Hazardous Condition is required within 30 days of the verbal notification.

*In general, Iowa reporting requirements are more stringent than Federal reporting requirements. However, the **time limit** for reporting at the Federal level is more immediate.*

IOWA DNR EMERGENCY RESPONSE UNIT
6200 Park Avenue, Ste 200 / Des Moines, IOWA 50321
515-725-8694 TDD 515-242-5967 www.iowadnr.gov

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL SERVICES DIVISION
FIELD SERVICES & COMPLIANCE BUREAU

Guidelines for Reporting Hazardous Conditions Written Report Requirements

24 hour number for release reporting 515/725-8694

The Iowa Department of Natural Resources
Requires a written report of any Hazardous Condition.
(VERBAL REPORT REQUIRED WITHIN 6 HOURS)

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 of discovery.
h. The name, mailing address, and telephone number of the person reporting the hazardous condition.
i. The name and telephone 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 the proper evaluation by the department.

The written report should include the IDNR Spill Number (assigned at the time of the verbal report) and be addressed to the duty officer responding to the spill. Reports can be sent via mail, fax, or electronic mail to the addresses listed below.

Mail	Fax	E-Mail
Iowa DNR Field Services Emergency Response 6200 Park Ave. Ste 200 Des Moines, IA 50321	515/725-8201	Emergency_Response@dnr.iowa.gov

Written Report for Hazardous Conditions

The Iowa Department of Natural Resources
Requires a written report of any Hazardous Condition.

(VERBAL REPORT REQUIRED WITHIN 6 HOURS)

Written Report. The written report of a hazardous condition shall be submitted to the department within 30 days and contain the following information (Please complete as much as possible):

DNR Spill Number for hazardous condition: _____

Location of hazardous condition:

Physical Address _____ City _____

Legal Address Lat/Long or Twn/Rng _____ Zip _____

Other description _____

Time and Date of *onset or discovery* of hazardous condition:

Time _____ ☐ AM ☐ PM Date _____

Time and Date of *verbal report* to the department of the hazardous condition:

Time _____ ☐ AM ☐ PM Date _____

Hazardous Condition:

Name of material/substance(s)	Manufacturer	Volume

If more space is needed add additional pages. Attach a Material Safety Data Sheet (MSDS) if possible.

The medium in which the hazardous condition occurred/existed (Check all that apply):

☐ Ground Water ☐ Surface Water ☐ Land ☐ Air

Weather Conditions during the time of the hazardous condition onset or discovery:

Temperature	Wind Direction	Wind Speed	Humidity	Precipitation

Contact Information:

	Name	Company	Mailing Address	Telephone
Person Reporting (if known)				
Party Responsible				
Site Contact				

Cause of the Incident: Write a narrative of the events leading to the incident

Initial Actions Taken: Write a narrative of the initial actions and instructions taken or required.

Written reports should include the DNR spill number and be addressed to the duty officer responding to the spill. Reports can be sent via mail, fax, or electronic mail.

Mail	Fax	Email
DNR Emergency Response 6200 Park Ave Ste 200 Des Moines IA 50321	515-725-8201	Emergency_Response@dnr.iowa.gov

Thank You

EPA

When are You Required to Report an Oil Spill and Hazardous Substance Release?

When are you required to report a spill or release? | What information is needed when reporting a spill or release? <https://epa.gov/emergency-response/what-information-needed-when-reporting-oil-spill-or-hazardous-substance-release>

Any person or organization responsible for a release or spill is required to notify the federal government when the amount reaches a federally-determined limit. Separate reporting requirements exist for:

- Oil spills
- Hazardous substance releases

States also may have separate reporting requirements. However, anyone who discovers a hazardous substance release or oil spill is encouraged to contact the federal government, regardless of whether they are the responsible party. All it takes is a single telephone call to the National Response Center <http://www2.epa.gov/emergency-response/national-response-center> at (800) 424-8802.

For More Information

Oil Spills

EPA has established requirements to report spills to navigable waters or adjoining shorelines. EPA has determined that discharges of oil in quantities that may be harmful to public health or the environment include those that:

- Violate applicable water quality standards;
- Cause a film or "sheen" upon, or discoloration of the surface of the water or adjoining shorelines; or
- Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

Any person in charge of vessels or facilities that discharge oil in such quantities is required to report the spill to the federal government. EPA provides several exemptions from the oil spill reporting requirements <https://epa.gov/oil-spills-prevention-and-preparedness-regulations/oil-spills-do-not-need-be-reported>.

The requirement for reporting oil spills stems from the Discharge of Oil Regulation <https://epa.gov/oil-spills-prevention-and-preparedness-regulations/overview-discharge-oil-regulation-sheen-rule>, known as the "sheen rule." Under this regulation, oil spill reporting does not depend on the specific amount of oil spilled, but on the presence of a visible sheen created by the spilled oil. Reporting an oil discharges may also be required under the Spill Prevention, Control, and Countermeasure (SPCC) Rule <https://epa.gov/oil-spills-prevention-and-preparedness-regulations/overview-spill-prevention-control-and>. For more information on reporting oil discharges, please see: Oil Discharge Reporting Requirements: How to Report to the National Response Center and EPA <https://epa.gov/emergency-response/oil-discharge-reporting-requirements>

Hazardous Substances

For releases of hazardous substances, the federal government has established Superfund Reportable Quantities (RQs) <https://epa.gov/epcra/cercla-and-epcra-continuous-release-reporting>. If a hazardous substance is released to the environment in an amount that equals or exceeds its RQ (Reportable Quantity), the release must be reported to federal authorities, unless certain reporting exemptions for hazardous substance releases also apply.

Under the Emergency Planning and Community Right-to-Know Act (EPCRA) <https://epa.gov/epcra> of 1986, the federal government has designated several hundred substances as "extremely hazardous substances" based on their acute lethal toxicity. Under the law, releases of these extremely hazardous substances trigger reporting requirements to state and local authorities, as well as the federal authorities. The

owner or operator of a facility that releases an extremely hazardous substance in an amount greater than its established RQ must follow requirements on how to report <https://epa.gov/emergency-response/what-information-needed-when-reporting-oil-spill-or-hazardous-substance-release> to the appropriate authorities (in many cases, the State Emergency Response Commission (SERC) and the Local Emergency Planning Committee (LEPC)) for the location where the incident occurs.

For More Information

For more information on reporting hazardous substance releases, please see: Frequent Questions <https://epa.gov/epcra/emergency-planning-and-community-right-know-act-frequent-questions>.

Last updated on June 23, 2025

Oil Discharge Reporting Requirements

If a facility or vessel discharges oil to navigable waters or adjoining shorelines, the owner/operator is required to follow certain federal reporting requirements. These requirements are found in two EPA regulations – 40 CFR part 110 <https://www.ecfr.gov/current/title-40/chapter-i/subchapter-d/part-110> (Discharge of Oil regulation) and 40 CFR part 112 <https://www.ecfr.gov/current/title-40/chapter-i/subchapter-d/part-112> (Oil Pollution Prevention regulation). The Discharge of Oil regulation provides the framework for determining whether an oil discharge to inland and coastal waters or adjoining shorelines should be reported to the National Response Center <https://epa.gov/emergency-response/national-response-center>.

The Oil Pollution Prevention regulation, part of which is commonly referred to as the Spill Prevention, Control and Countermeasure rule, identifies certain types of discharges from regulated facilities that also need to be reported to EPA. Although these reporting requirements were not changed by EPA's recent modifications of the SPCC rule, this fact sheet will help facilities with the Reportable Discharge History criterion associated with the qualified facility option and the oil-filled operational equipment option offered in the recent SPCC modifications.

EPA-550-F-06-006

December 2006

How to Report Oil Discharges to the National Response Center and EPA

If a facility or vessel discharges oil to navigable waters or adjoining shorelines, waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or Deepwater Port Act of 1974, or which may affect natural resources under exclusive U.S. authority, the owner/operator is required to follow certain federal reporting requirements. These requirements are found in two EPA regulations – 40 CFR part 110, Discharge of Oil regulation, and 40 CFR part 112, Oil Pollution Prevention regulation. The Discharge of Oil regulation provides the framework for determining whether an oil discharge to inland and coastal waters or adjoining shorelines should be reported to the National Response Center. The Oil Pollution Prevention regulation, part of which is commonly referred to as the "SPCC rule," identifies certain types of discharges from regulated facilities that also need to be reported to EPA. Although these reporting requirements were not changed by EPA's recent modifications of the SPCC rule, this Fact Sheet will help facilities with the Reportable Discharge History criterion associated with the qualified facility option and the oil-filled operational equipment option offered in the recent SPCC modifications.

Who is subject to the Discharge of Oil regulation?

Any person in charge of a vessel or of an onshore or offshore facility is subject to the reporting requirements of the Discharge of Oil regulation if it discharges a harmful quantity of oil to U.S. navigable waters, adjoining shorelines, or the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or Deepwater Port Act of 1974, or which may affect natural resources under exclusive U.S. authority.

What is a "harmful quantity" of discharged oil?

A harmful quantity is any quantity of discharged oil that violates state water quality standards, causes a film or sheen on the water's surface, or leaves sludge or emulsion beneath the surface. For this reason, the Discharge of Oil regulation is commonly known as the "sheen" rule. Note that a floating sheen alone is not the only quantity that triggers the reporting requirements (e.g., sludge or emulsion deposited below the surface of the water may also be reportable). Under this regulation, reporting oil discharges does not depend on the specific amount of oil discharged, but instead can be triggered by the presence of a visible sheen created by the discharged oil or the other criteria described above.

To whom do I report an oil discharge?

A facility should report discharges to the National Response Center at 1-800-424-8802 or 1- 202-426-2675. The NRC is the federal government's centralized reporting center, which is staffed 24 hours per day by U.S. Coast Guard personnel. If reporting directly to NRC is not practicable, reports also can be made to the EPA regional office or the U.S. Coast Guard Marine Safety Office in the area where the incident occurred.

When must I report to NRC?

Any person in charge of a vessel or an onshore or offshore facility must notify NRC immediately after he or she has knowledge of the discharge.

What information do I need to report?

NRC will ask a caller to provide as much information about the incident as possible including:

- Name, organization, and telephone number
- Name and address of the party responsible for the incident
- Date and time of the incident

- Location of the incident
- Source and cause of the discharge
- Types of material(s) discharged
- Quantity of materials discharged
- Danger or threat posed by the discharge Oil Discharge Reporting Fact Sheet Oil Discharge Reporting Fact Sheet
- Number and types of injuries (if any)
- Weather conditions at the incident location
- Other information to help emergency personnel respond to the incident

How are reports to NRC handled?

NRC relays information to an EPA or U.S. Coast Guard On Scene Coordinator, depending on the location of the incident. After receiving a report, the OSC evaluates the situation and decides if federal emergency response action is necessary.

If I report a discharge to NRC, do I also report to EPA?

If a facility is regulated under the SPCC rule and has a reportable discharge according to EPA regulations (see below), it must be reported to both NRC and EPA.

What are the oil discharge reporting requirements in the SPCC rule?

Any facility owner/operator who is subject to the SPCC rule must comply with the reporting requirements found in §112.4. A discharge must be reported to the EPA Regional Administrator when there is a discharge of:

- More than 1,000 U.S. gallons of oil in a single discharge to navigable waters or adjoining shorelines

- More than 42 U.S. gallons of oil in each of two discharges to navigable waters or adjoining shorelines occurring within any twelve-month period.

When determining the applicability of this SPCC reporting requirement, the gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines, not the total amount of oil spilled.

What do I need to submit to EPA?

The owner/operator must provide the following:

- Name and location of the facility
- Owner/operator name
- Maximum storage/handling capacity of the facility and normal daily throughput
- Corrective actions and countermeasures taken, including descriptions of equipment repairs and replacements
- Adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary
- Cause of the discharge to navigable waters, including a failure analysis
- Failure analysis of the system where the discharge occurred
- Additional preventive measures taken or planned to take to minimize discharge reoccurrence
- Other information the RA may reasonably require An owner/operator must also send a copy of this information to the agency or agencies in charge of oil pollution control activities in the state in which the facility is located. What happens after a facility submits this information to EPA? The EPA Regional Administrator will review the information submitted by the facility and may require a facility to submit and amend its SPCC Plan. Facilities and equipment that qualified for the new streamlined requirements may lose eligibility for those options as determined by the Regional Administrator. A state agency may also make recommendations to EPA for a facility to amend its Plan to prevent or control oil discharges.

To report an oil or chemical discharge contact the National Response Center (202) 267-2675.

Last updated on November 18, 2025

ATTACHMENT C

Emergency Contact List

When contacting emergency services via 9-1-1, be prepared to provide the following information:

- Your name and "South Central Iowa Sanitary Landfill."
  - Give a description of the emergency such as the type and estimated quantity of material involved, fire, explosion, leak, spill, wind direction, injuries, etc.
- Location of emergency (2520 Highway 92, Winterset, Iowa).
  - The physical location may need to be given so be ready to give verbal directions:
- How/who to contact at the scene.
- DO NOT HANG UP unless instructed to do so by the dispatcher OR your personal safety is jeopardized.

Emergency and Release Notifications and Reporting

1. Federal Agencies

Environmental Protection Agency, Region 7
Phone: 800-223-0425

National Response Center
Phone: 800-424-8802

National Pesticide Information Center
Phone: 800-858-7378

2. State Agencies

Iowa Department of Natural Resources
Spill Notification
502 East 9th Street
Des Moines, Iowa 50319-0034
Emergency response phone number: 515-725-8694

Iowa Department of Natural Resources
Field Office No. 5
6200 Park Avenue, Suite 200
Des Moines, IA 50321
Phone: 515-725-0268

3. County and city agencies including emergency management services

Law Enforcement
Madison County Sheriff Department
1012 N John Wayne Drive, PO Box 517
Winterset, IA 50273
Emergency: 9-1-1
Non-Emergency Phone: 515-462-3575

Medical Emergency
Emergency: 9-1-1
Madison County Memorial Hospital
300 Hutchings Street
Winterset, IA 50273
Non-Emergency Phone: 515-462-2373

Fire and Rescue
Winterset Fire Department
Emergency 9-1-1
Non-Emergency Phone: 515-650-7188

Madison County Emergency Management
Madison County Annex
Lower Level, 201 West Court
Winterset, IA 50273
Phone: 515-462-4255

Madison County Environmental Health
Madison County Annex
Lower Level, 201 West Court
Winterset, IA 50273
Phone: 515-462-2636

4. Utilities

Electrical Emergencies
MidAmerican Energy
Phone: 1-888-427-5623

Propane
Agriland
Phone: 515-462-2644

Water
Warren Rural Water
Phone: 515-962-1200

5. Major Haulers

Ankeny Sanitation, 515-964-5229
Aspen Waste, 515-974-1400
Avery Sanitation, 641-740-2958
Country Trash, 641-947-6000
Cowden, 515-848-3731
J&L Sanitation, 641-765-4282
Jim's Sanitation, 641-344-2694 641-782-6996
Midwest Sanitation, 641-628-2610
TRM Disposal, 515-208-5906
Waste Connections, 515-265-7374
Waste Management/DSM, 630-652-9036
Waste Management/Creston, 515-202-8598 630-652-9036
Wiegert Disposal, 515-468-0343

6. News Media

Radio
WHO 1040 AM, 515-245-8900

Newspaper
Winterset Madisonian, 515-462-2101

APPENDIX 3

Certified Landfill Operators for South Central Iowa Sanitary Landfill

Marcia Beeler - #30033

Alan Utsler - #30474

Verl Dillinger - #30984

SECTION F

Environmental Monitoring Plan

ENVIRONMENTAL MONITORING PLAN

113.9 ENVIRONMENTAL MONITORING AND CORRECTIVE ACTION REQUIREMENTS FOR AIR QUALITY AND LANDFILL GAS

113.9(1) Air Criteria

The South Dallas County SLF operates under the following permit related to air quality:

- Air Quality Construction Permit (Permit 11-A-101-S1) dated December 8, 2023

113.9(2) Landfill Gas

Gas monitoring shall be as per the Gas Monitoring System Plan (GMSP) included in the "Hydrogeologic Investigation Report & Hydrologic Monitoring System Plan & Gas Monitoring System Plan" submitted in the 2021 Permit Renewal Documentation (Doc #99511).

Since 2021, the site buildings have been replaced following the March 5, 2022 tornado and Phase 1 of Cells A&B was constructed and is receiving waste. Gas monitoring points have been added as required and/or approved by various correspondence and are monitored in accordance with the GMSP. The Revised HMSP/GMSP dated August 18, 2023 (Doc #107500) itemizes the current GMSP. The list of current monitoring points approved in Permit Revision #6, dated August 24, 2023 (Doc #107547) is summarized as:

Monitoring Point	**Description**
GP-1	Subsurface Gas Probe
GP-2	Subsurface Gas Probe
GP-3	Subsurface Gas Probe (Dry well MW-7A)
GP-4	Subsurface Gas Probe
GP-5	Subsurface Gas Probe
GP-6	Subsurface Gas Probe
GP-7	Subsurface Gas Probe (rural water meter pit)
GP-8	Subsurface Gas Probe (buried telephone line pedestal)
Office	2023 Office Building
Shop	2023 Equipment Storage/Shop Building
Leachate Building	The former leachate pre-treatment building – west side
Tile 1 Cleanout	Cleanout on south end Tile 1
Tile 1 Discharge	Discharge end of Tile 1 on west end
Tile 2 Cleanout	Cleanout on east end Tile 2
Tile 2 Discharge	Discharge end of Tile 2 on west end
GU-1	Underdrain below West Lagoon
GU-2	Underdrain below East Lagoon
GU-A	Underdrain below Cell A
GU-B	Underdrain below Cell B

113.10 ENVIRONMENTAL MONITORING AND CORRECTIVE ACTION REQUIREMENTS FOR GROUNDWATER AND SURFACE WATER

113.10(1) General Requirements for Environmental Monitoring and Corrective Action for Groundwater and Surface Water

113.10(2) Groundwater Monitoring Systems

The groundwater monitoring shall be as approved in Special Provision X.4 of Permit Revision #11, dated December 3, 2025 (Doc #115104) and detailed in the "Hydrogeologic Investigation Report & Hydrologic Monitoring System Plan & Gas Monitoring System Plan" submitted in the 2021 Permit Renewal Documentation (Doc #99511). Special Provision X.4 of Permit Revision #11 dated December 3, 2025 (Doc #115104) incorporates approved changes made to the HMSP in Permit Revision #5 (August 14, 2023 – Doc #107471), Permit Revision #6 (August 24, 2023 – Doc #107547), and Permit Revision #10 (November 18, 2024 – Doc #111332).

113.10(3) Surface Water Monitoring Systems

Surface water monitoring is included in the Monitoring Program at this site. The surface water monitoring shall be as approved in Special Provision X.4 of Permit Revision #11, dated December 3, 2025 (Doc #115104) and as detailed in the "Hydrogeologic Investigation Report & Hydrologic Monitoring System Plan & Gas Monitoring System Plan" submitted in the 2021 Permit Renewal Documentation (Doc #99511).

Surface Water Point	*Description*
SW-2B	Downgradient - West Side Stream where it exits the property.

113.10(4) Groundwater Sampling and Analysis Requirements

Per Permit Revision #11, dated December 3, 2025 (Doc #115104) and as detailed in the "Hydrogeologic Investigation Report & Hydrologic Monitoring System Plan & Gas Monitoring System Plan" submitted in the 2021 Permit Renewal Documentation (Doc #99511), the HMSP includes the following:

Glacial Till/Fill (System #1)
Background Points MW-18, MW-34A, and MW-38A.
Downgradient Point of Compliance (POC) Wells MW-1R, MW-6A (Bethany Falls), and MW-45.
Attenuation Zone POC points Tile 1, Tile 2, MW-21, and MW-44.
Groundwater Underdrain points GU-1 (west lagoon), GU-2 (east lagoon), GU-A (Phase 1, Cell A), and GU-B (Phase 1, Cell B).

Exline Limestone Formation (System #4)
Background MW-11C, MW-39D, MW-41D, and MW-42D
Downgradient POC MW-14D, MW-17R, MW-28, and MW-45D
Attenuation Zone POC point MW-28

Supplemental Downgradient Attenuation Zone Groundwater Monitoring Wells
MW-8B (Unconsolidated) – AZPOC is MW-21
MW-9AR (Unconsolidated) – AZPOC is Tile 1 & Tile 2
MW-15R (Exline) – AZPOC is MW-44

Passively Engineered Conveyance Structure
SW-102

Corrective Action Monitoring Points
MW-31
MW-32
Leachate Well LW-26
Passive Landfill Gas Vents (Vents) 1-6

113.10(5) Detection Monitoring Program

No-purge sampling methods were employed beginning in September, 2014 to meet the requirements of the July 10, 2014 Unnumbered Permit Amendment related to sample turbidity.

Water samples continue to be collected semi-annually for detection monitoring parameters (at a minimum) at site monitoring wells. Based on the testing to date, wells that remain in detection monitoring have no recorded statistically significant increases (SSI) recorded.

113.10(6) Assessment Monitoring Program

The Assessment Monitoring Program is implemented at monitoring points where an SSI has been recorded.

113.10(7) Assessment of Corrective Measures

The initial Assessment of Corrective Measures report related to MW-9A was submitted July 1, 2011. Revision of the ACM for the area near MW-9A and near MW-8B was submitted in March 2017 (Doc #88918) and a Supplement was submitted September 11, 2019 (Doc #95931) that addressed MW-8B, MW-9AR, and MW-14D. The ACM report was approved by IDNR on October 11, 2019 (Doc #96104). A Supplement was submitted August 3, 2023 (Doc #107390) that addressed MW-15R. The ACM-CAP report was approved by IDNR on August 14, 2023 (Doc #107470).

113.10(8) Selection of Remedy

The corrective measure was selected by SCILA on January 15, 2020 and the final Corrective Action Plan (CAP) and Corrective Action Monitoring Plan (CAMP) was submitted January 24, 2020. The original CAP/CAMP addressing MW-8B, MW-9R, and MW-14D was approved by IDNR in Permit Revision #12, dated June 4, 2020 (Doc #97864). The supplemental ACM-CAP report to address MW-15R was approved by IDNR on August 14, 2023 (Doc #107470).

113.10(9) Implementation of the Corrective Action Plan

The Corrective Action includes Monitored Natural Attenuation coupled with the construction of six (6) passive landfill gas vents along the west edge of the waste mass. The six (6) vents were constructed August 17, 2020 and August 18, 2020. Construction documentation for the six (6) vents was submitted on September 11, 2020 (Doc # 98442) and was approved in Permit Revision #13, dated September 25, 2020 (Doc #98526).

The Corrective Action Monitoring Plan was implemented on September 2, 2020.

113.10(10) Annual Water Quality Reports

Annual Water Quality Reports (AWQR) will be submitted prior to January 31 of each year. A Semi-Annual Water Quality Notification will be submitted upon receipt of the analytical results and statistical evaluations following the first sampling episode each year.

SECTION G

Project Goals and Timelines for RD&D Permits

RESEARCH, DEVELOPMENT AND DEMONSTRATION PERMITS

The South Central Iowa SLF currently has no EPA RD&D Permits.

SECTION H

Proof of Financial Assurance

IOWA DEPARTMENT OF NATURAL RESOURCES

GOVERNOR, KIM REYNOLDS
LT. GOVERNOR, CHRIS COURNOYER
DIRECTOR, KAYLA LYON

May 27, 2025

DIANE FITCH
CHAIR
SOUTH CENTRAL IOWA LANDFILL AGENCY
2520 HIGHWAY 92
WINTERSET IA 50273

Re: South Central Iowa Sanitary Landfill
Permit Number 61-SDP-01-78P
Approval of Financial Assurance

Dear Ms. Fitch:

This is notification by the Iowa Department of Natural Resources (DNR) that the South Central Iowa Landfill Agency (Agency) has adequately complied with the financial assurance requirements of 567 IAC 113.14(455B) for the South Central Iowa Sanitary Landfill. The Agency's financial assurance documentation (Doc #112531), received March 19, 2025, has been placed in the DNR's record files.

The projected deposit of **$257,696** to the Agency's closure and postclosure 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 Form.

Please note that the Agency may withdraw money from the closure and postclosure LGDF without DNR approval for the purpose of funding closure, including partial closure, or postclosure 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
Program Planner
Land Quality Bureau

Cc: Doug Luzbetak, P.E., HLW Engineering Group
Iowa DNR Field Office #5, Des Moines

SECTION I

Closure and Postclosure Plan

CLOSURE AND POSTCLOSURE PLAN

A Closure and Postclosure Plan (CPCP) was included in the 2021 Permit Renewal Documentation (Doc # 99511). Additional information was submitted on December 16, 2021 (Doc #101889). The information has been approved by IDNR as per Special Provision X.2.b.4) of the SDP Permit. The approved CPCP is still applicable except as noted below:

113.12(1) Final Cover System

All unlined landfilling areas at the South Central Iowa Sanitary Landfill (SLF) have been closed. The unlined areas have been closed with a four foot soil cap meeting the general requirements listed under subrule 113.12(2).

Closure documentation for the unlined landfilling areas has been submitted in the following:

- "Construction Certification Report and Record Drawings" dated February 16, 2006 (Doc #53101) submitted by FOX Engineering. The documentation was approved by IDNR on April 27, 2006.
- "Quality Control and Assurance Report, Closure of Unlined Areas" dated January 25, 2011 (Doc #63289) submitted by HLW Engineering documented construction of final cover during 2007-2010. The documentation was approved by IDNR on March 9, 2011.
- "2011 Closure of Unlined Areas" report dated December 30, 2011 (Doc #68146) submitted by HLW Engineering. The documentation was approved by IDNR on March 28, 2012.

Note that based on the above approvals IDNR recognized that "the permit holder has demonstrated that final cover, compliant with the rules in effect when waste disposal ceased in each area, has been constructed over the entirety of the unlined disposal area". The areas that have been closed to date are shown on Figure 9 in Appendix 1 of Section D of this Submittal.

No areas of the Subtitle D compliant lined disposal areas have been closed to date.

The final cover shall have a slope between 5 percent and 25 percent. A steeper slope can be utilized if it is demonstrated to the IDNR that the steeper slope is unlikely to adversely affect the integrity of the final cover system.

The active disposal areas at the South Central Iowa SLF have been constructed with composite liners meeting EPA Subtitle D requirements and will be closed with a composite cap consisting of:

a. A gas collection layer. The gas collection layer shall consist of a geonet composite to transport gas collected immediately below the cap to the gas collection system, reducing potential gas pressure on the flexible membrane liner

(FML) in the cap discussed in (c) below.

b. An infiltration layer of not less than 18 inches of compacted soil. The hydraulic conductivity of the infiltration layer will be no greater than $1x10^{-7}$cm/sec. The percent of standard proctor density at a moisture content consistent with expected field conditions and corresponding to a measured coefficient of hydraulic conductivity no greater than $1x10^{-7}$cm/sec shall be determined in the laboratory. The soil shall be placed in lifts not to exceed eight inches in thickness. A minimum of five field density tests shall be performed per lift per acre to verify density has been achieved as determined by laboratory analysis as correlated to hydraulic conductivity. In place hydraulic conductivity testing utilizing shelby tubes will also be completed on the infiltration layer. The testing requirements will be further detailed in the Quality Control and Assurance (QC&A) Plan, which will be submitted to the IDNR prior to the start of closure activities. Results of field density and hydraulic conductivity tests shall be submitted to the IDNR in the QC&A Report submitted at the completion of each construction project.

   Historical soil testing has indicated that soils are available to the facility that can meet the $1x10^{-7}$cm/sec hydraulic conductivity requirements. Additional soil samples are routinely tested for hydraulic conductivity as the waste disposal areas are further developed, and additional soil testing/geotechnical explorations will be undertaken as necessary prior to any project requiring low hydraulic conductivity soil to insure an adequate supply exists prior to a construction project starting. If adequate supplies are not available, soils will either be amended to meet the hydraulic conductivity requirements or suitable soils will be obtained off site.

c. A minimum 30 mil thick PVC geomembrane or minimum 40 mil thick LLDPE geomembrane.

d. A drainage layer consisting of a geonet drainage composite. The drainage layer will limit future leachate production and protect the geomembrane and infiltration layer by providing drainage for any water that passes through the erosion layer discussed in (e) below. The drainage layer will outlet to pipes which will outlet to the ground surface at regular intervals.

e. An erosion layer of not less than 24 inches of uncompacted soil containing sufficient organic matter to support vegetation. The thickness of the erosion layer will be equal to at least the root depth of the vegetative cover to prevent root penetration into the underlying soil layers.

SECTION J

Comprehensive Plan Approval

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

Rnd8CompPlanAppvl_SCILA

1 message

Rasmus, Laurie <laurie.rasmus@dnr.iowa.gov> Mon, Feb 14, 2022 at 3:26 PM
To: Marcia Beeler <scilamab@aol.com>, Todd Whipple <twhipple@hlwengineering.com>
Cc: Ted Petersen <ted.petersen@dnr.iowa.gov>, Shelene Codner <shelly@netins.net>, Jennifer Wright <jennifer.wright@dnr.iowa.gov>, "Jolly, Becky" <becky.jolly@dnr.iowa.gov>

IOWA DEPARTMENT OF NATURAL RESOURCES

GOVERNOR KIM REYNOLDS
LT. GOVERNOR ADAM GREGG
DIRECTOR KAYLA LYON

February 14, 2022 - DIGITAL LETTER ONLY - VIA EMAIL

Ms. Marcia Beeler
South Central Iowa Landfill Agency
2490 Highway 92
Winterset IA 50273

Dear Ms. Beeler:

SOUTH CENTRAL LANDFILL AGENCY
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.

The official planning area Goal Progress determination is 0.65% for Fiscal Year 2021. 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.

The planning area's tonnage fees will remain at the rate for less than 25% diversion. The fee structure is outlined in the attached Tonnage Fee Distribution Fact Sheet. Questions regarding tonnage fee submittal may be directed to Becky Jolly at 515-725-8308 or becky.jolly@dnr.iowa.gov.

The DNR's Financial and Business Assistance (FABA) Section has resources available to assist communities, businesses, and solid waste planning areas with programs. The webpage may be found at http://www.iowadnr.gov/faba. Waste reduction, pollution prevention and financial assistance are all areas of emphasis. In addition, the voluntary Environmental Management System (EMS) program provides benefits beyond waste reduction.

Should you have questions or like further information about DNR programs or this letter, please contact me at 515-474-4921 or Laurie.Rasmus@dnr.iowa.gov.

Sincerely,

Laurie Rasmus
Land Quality Bureau, Financial and Business Assistance

3 attachments

FY2021_Rnd8_SCILA_02-08-2022.pdf
168K

CkIst_SCILA_Rnd 8_Final 2-14-2022.pdf
327K

Tonnage Fee Distribution_Fact Sheet(3)_rev June 2020.pdf
433K

BASE-YEAR ADJUSTMENT METHOD REPORT TABLE

NAME OF PLANNING AR South Central Iowa Landfill Agency

CURRENT YEAR (CY): FY2021_Round 8_ 02-08-2022
BASE YEAR: FY1988 and 1994/95 (Osceola)
May be different from 1988 in some cases because of adjustments made when scales were first used at the LF

	FACTORS				NOTES
STEP 1: Basic Information		***Osceola***	***SCILA***	*Total*	
1	Base Year Residential Waste Disposal	790	13,006	13,796	PA is sum of BY population columns
2	Base Year Commercial/Industrial Waste Disposal	2,370	15,896	18,266	PA is sum of BY population columns
3	Base Year Total Waste Disposal	3,160	28,902	32,062	PA is sum of BY population columns
4	CY Waste Disposal			48,539	G
5	Base Year Population	4,007	43,138	47,145	PA is sum of BY population columns
	% of Total Population for BY	8.50%	91.50%		
6	CY Population			60,033	H
7	Base Year Employment	1,451	18,853	20,303	PA is sum of BY population columns
8	CY Employment			32,761	I
9	Base Year Taxable Sales	$31,533,452	$112,836,900	$144,370,352	PA is sum of BY population columns
	% of Total Taxable Sales for BY	21.84%	78.16%		
10	CY Taxable Sales			$484,789,181	J
11	Base Year Consumer Price Index	149.27	115.84	123.14	PA weighted by BY taxable sales% shares
12	CY Consumer Price Index			263.1507	FY2021
STEP 2: CY Taxable Sales Corrected for Inflation					
13	Inflation Correction Factor			0.4679539	F/K
14	CY Corrected Taxable Sales			$226,859,007	J*(F/K)
STEP 3: FY95 and Current Year Ratios					
15	Population Ratio (PR)			1.2733812	H/C
16	Employment Ratio (ER)			1.6135476	I/D
17	Taxable Sales Ratio (TR)			1.5713684	(J*F/K)/E
STEP 4: Adjustment Factors					
18	Base Year Commercial/Industrial Adjustment Factor			1.5924580	Average of Lines 16 & 17
19	Base Year Residential Adjustment Factor			1.4329196	Average of Lines 15 & 18
STEP 5: Adjusted Base Year Disposal Tonnages					
20	Base Year Adjusted Residential Waste Disposal			19,768	A * Line 19
21	Base Year Adjusted Commercial/Industrial Waste Disposal			29,088	B * Line 18
22	Base Year Adjusted Total Waste Disposal			48,857	
STEP 6: Goal Progress and Reduction Percentage Results					
23	CY Waste Disposal (from line #4)			48,539	G
24	Maximum Allowable Disposal to Attain 25 Percent Goal			36,643	Line 22*0.75
25	Actual Tonnage Over (or Under) 25 Percent Goal			11,897	Line 23 minus Line 24
26	Maximum Allowable Disposal to Attain 50 Percent Goal			24,428	Line 22*0.5
27	Actual Tonnage Over (or Under) 50 Percent Goal			24,111	Line 23 minus Line 26
28	**CURRENT DISPOSAL REDUCTION (PERCENTAGE)**			**0.65%**	**(Line 22 minus Line 23)/Line 22**

Planning Area (PA)	County	City	2020 Census	PA Pop. (H)	Pop. % in PA	FY2021 Non-Farm Jobs	FY2021 Non-Farm Jobs in PA (I)	FY2020 Taxable Sales in PA (J)
Prairie	Clarke	Murray	684					
SCILA	Clarke	Osceola	5,415	5,415				$80,888,370
Prairie	Clarke	Woodburn	146					
Prairie	Clarke	zz.Unicorporated area	3,503					
	Clarke		**9,748**	**5,415**	**55.55%**	**4,178**	**2,321**	**$80,888,370**
MWA	Dallas	Adel	6,153					
CISWMA	Dallas	Bouton	127					
SCILA	Dallas	Dallas Center	1,901	1,901				$11,529,091
MWA	Dallas	Dawson	116					
SCILA	Dallas	De Soto	915	915				$14,522,554
SCILA	Dallas	Dexter	640	640				$6,286,217
CISWMA	Dallas	Granger	1,654					
MWA	Dallas	Linden	200					
MWA	Dallas	Minburn	325					
MWA	Dallas	Perry	7,836					
MWA	Dallas	Redfield	731					
SCILA	Dallas	Van Meter	1,484					
MWA	Dallas	Waukee	23,940					
CISWMA	Dallas	Woodward	1,346					
MWA	Dallas	zz.Unicorporated area	52,310					
	Dallas		**47,368**	**3,456**	**7.30%**	**51,925**	**3,788**	**$32,337,862**
SCILA	Madison	Bevington	57	57				
SCILA	Madison	Earlham	1,410	1,410				$15,013,999
SCILA	Madison	East Peru	115	115				
Prairie	Madison	Macksburg	97					
SCILA	Madison	Patterson	176	176				
SCILA	Madison	St. Charles	640	640				$3,639,418
SCILA	Madison	Truro	509	509				$2,650,037
SCILA	Madison	Winterset	5,353	5,353				$84,288,486
SCILA	Madison	zz.Unicorporated area	8,191	8,191				$6,266,652
	Madison		**16,548**	**16,451**	**99.41%**	**8,620**	**8,570**	**$111,858,592**
SCILA	Warren	Ackworth	115	115				$556,373
MWA	Warren	Carlisle	4,160					
SCILA	Warren	Cumming	436	436				$10,081,669
MWA	Warren	Hartford	733					
SCILA	Warren	Indianola	15,833	15,833				$222,232,548
SCILA	Warren	Lacona	345	345				$3,053,026
SCILA	Warren	Martensdale	421	421				$1,245,563
SCILA	Warren	Milo	778	778				$4,292,014
SCILA	Warren	New Virginia	498	498				$5,154,189
MWA	Warren	Norwalk	12,799					
SCILA	Warren	Sandyville	58	58				
SCILA	Warren	Spring Hill	68	68				
SCILA	Warren	St. Marys	108	108				$529,588
SCILA	Warren	zz.Unicorporated area	16,051	16,051				$12,559,387
	Warren		**52,403**	**34,711**	**66.24%**	**27,298**	**18,082**	**$259,704,357**
	ALL			**60,033**			**32,761**	**$484,789,181**
				H			**I**	**J**

PA	Permit #	Facility	FY2021 Tons, Non Exempt	Released (non HF399) (+)	From another PA (non HF 399) (-)	Out of State (-)	Exceptional Event (-)	FY2021 PA Tons (G)
SCILA	61-SDP-01-78	South Central Iowa Sanitary Landfill	53,368.80	810.41			5,640.00	48,539.21