NCIRSWA SANITARY LANDFILL

2025 MUNICIPAL SOLID WASTE PERMIT RENEWAL

IDNR PERMIT NO. 94-SDP-01-75P

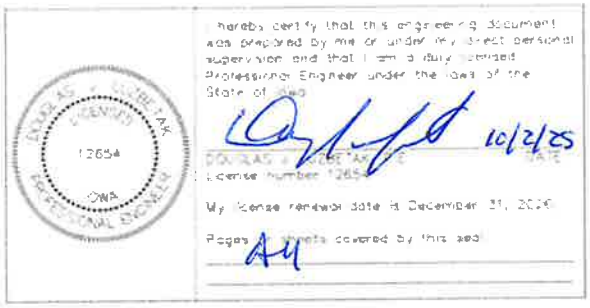
HLW Engineering Group, LLC
204 West Broad Street, PO Box 314
Story City, Iowa 50248
(515) 733-4144

HLW Project Number 6030-25A

2025 MUNICIPAL SOLID WASTE LANDFILL PERMIT RENEWAL

NCIRSWA SANITARY LANDFILL

IDNR PERMIT NO. 94-SDP-01-75P



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

IOWA DEPARTMENT OF NATURAL RESOURCES

Municipal Solid Waste Landfill

PERMIT APPLICATION FORM 50

☐ **New Permit**

☒ **Permit Renewal (permit number)** 94 **- SDP -** 01 **-** 75P **MLF**

☐ **Closure Permit**

SECTION 1: PERMIT APPLICATION REQUIREMENTS

Owner of site

Name: North Central Iowa Regional Solid Waste Agency Phone: 515-955-2781

Address: 2151 Gypsum Hollow Road, PO Box 578 Fax: 515-955-2781

City, State, Zip: Fort Dodge, IA 50501 E-mail: mark@ncirswa.org

Certified Operator Responsible for Operation at Facility

Name: Jason Potts Phone: 515-955-2781

Address: 2151 Gypsum Hollow Road, PO Box 578 Fax: 515-955-2781

City, State, Zip: Fort Dodge, IA 50501 E-mail: pottsy@ncirswa.org

Permit Applicant

Name: North Central Iowa Regional Solid Waste Agency Phone: 515-955-2781

Address: 2151 Gypsum Hollow Road, PO Box 578 Fax: 515-955-2781

City, State, Zip: Fort Dodge, IA 50501 E-mail: mark@ncirswa.org

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: Mark Campbell, Chief Operating Officer Phone: 515-955-2781

Address: 2151 Gypsum Hollow Road, PO Box 578 Fax: 515-955-2781

City, State, Zip: Fort Dodge, IA 50501 E-mail: mark@ncirswa.org

Agency and Responsible Official of Agency Served (if any)

Name: Cole Bockelman, Chair Phone: 515-955-2781

Address: 2151 Gypsum Hollow Road, PO Box 578 Fax: 515-955-2781

City, State, Zip: Fort Dodge, IA 50501 E-mail: coleb@cityofhumboldt.org

Facility

Name: North Central Iowa Regional Solid Waste Agency Sanitary Landfill

Address: 2240 Gypsum Hollow Road City, State, Zip: Fort Dodge, IA 50501

Legal Description:

See SECR in Doc #98643 and Section C of this permit renewal documentation.

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

Planning Area Name: North Central Iowa Regional Solid Waste Agency

Date of Last Approved Plan: 5/22/25

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

All cities and the unincorporated area in Webster County; all cities and the unincorporated area in Hamilton County; all cities and the unincorporated area in Humboldt County excluding the City of Bode; the City of Eagle Grove in Wright County; and the Cities of Rockwell City, Knierim, Pomeroy, and Manson and the North Central Correctional Facility in Calhoun County.

Population Served: 68,709

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: 98643

☒ 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: _____

☒ 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: 98643

☒ 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: Mark Campbell **Date:** 8/13/25

Printed Name: Mark Campbell **Title:** Chief Operating Officer

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. These changes to date are listed in Special Provision XI, "Permit Renewal and Revision History", of the SDP Permit Revision dated February 26, 2025. The following have been modified and included in this permit renewal documentation:

An updated Organizational Chart is included in Section B.

Updates to the approved Site Exploration and Characteristic Report are included in Section C.

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 updated Operator Certifications is included in Section E.

An updated Environmental Monitoring Plan is included in Section F.

Approval of the 2025 Financial Assurance documentation is included in Section H.

Updates to the approved Closure/Post-Closure Plan is included in Section I.

Summary of each Special Provision of the existing SDP Permit:

1. This provision should be updated to include the current approval date of May 22, 2025 for the North Central Iowa Regional Solid Waste Agency (NCIRSWA) Comprehensive Plan Update. A copy of the 2025 approval of the Comprehensive Plan is included in Section J of this permit renewal documentation.
2. A new Development and Operations Plan, including the conceptual layout of future disposal areas, is included in Section D of this permit renewal documentation. An updated Emergency Response and Remedial Action Plan (ERRAP) is being submitted in Appendix 2 of Section E.
3. No changes.
4. Hydrologic monitoring shall be as per the Hydrologic Monitoring System Plan (HMSP) in the Environmental Monitoring Plan (EMP) included in Section F of this permit renewal documentation.
5. Gas monitoring shall be as per the Gas Monitoring System Plan (GMSP) in the EMP included in Section F of this permit renewal documentation.
6. No changes.
7. No changes.
8. No changes.

9. No changes.
10. No changes.
11. No changes.
12. No changes.
13. No changes.
14. No changes.
15. No changes.
16. Pesticide containers are no longer collected at the landfill so this provision should be removed from the permit.
17. Updates to the approved Closure/Postclosure Plan are included in Section I of this permit renewal documentation.

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 date of each Permit Revision, brief comments on which Special Provision(s) were modified, replaced, added, removed, etc. with each Permit Revision, and the location in the Permit Revision for the modifications, replacements, additions, removals, etc. are included in Special Provision XI, "Permit Renewal and Revision History", of the SDP Permit Revision dated February 26, 2025. All of these items have been incorporated into the SDP Permit so no permit amendments have been issued during this permit period.

Summary of new Permit Amendment Requests:

None at this time.

Summary of Equivalency Review Requests:

None at this time.

Summary of new Variance Requests:

None at this time.

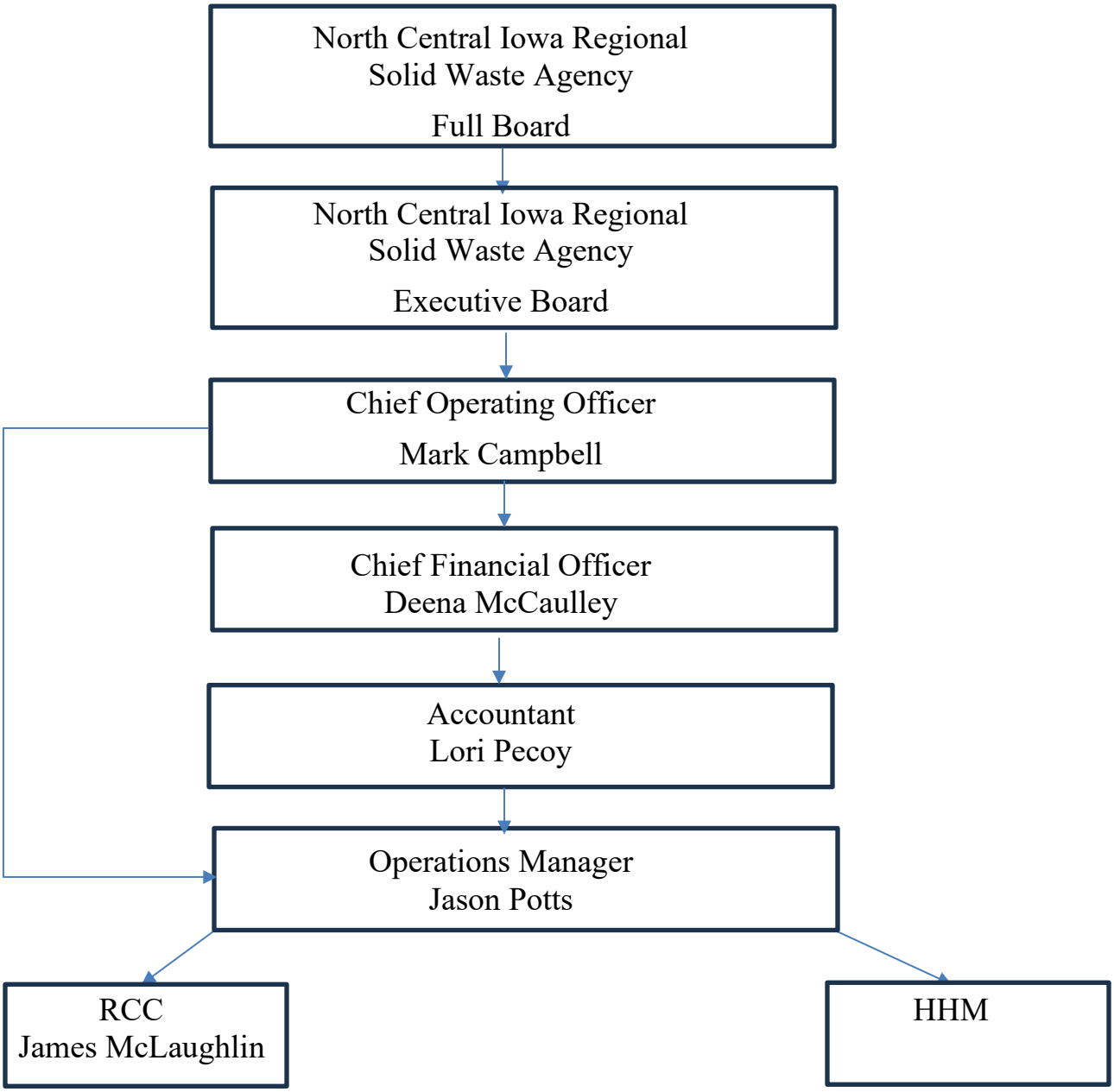
SECTION B

Organizational Chart

North Central Iowa Regional Solid Waste Agency

Organization Chart

August, 2025



SECTION C

Site Exploration and Characterization Report

SITE EXPLORATION AND CHARACTERIZATION REPORT

A Site Exploration and Characterization Report was included in the 2020 Permit Renewal Documentation (Doc # 98643). The 2020 Permit Renewal Documentation was approved in the SDP Permit renewal dated November 30, 2020 (Doc #99032). The approved Site Exploration and Characterization Report is still applicable with the following exceptions:

113.6(4)b Legal Description of the Site

The site is located in Sections 32 and 33, T89N, R28W, Section 1, T88N, R29W, and Section 6, T88N, R28W, Webster County, Iowa. A survey plat was provided in the 2020 Site Exploration and Characterization Report (Doc #98643). The North Central Iowa Solid Waste Agency purchased additional property in 2021 and 2022. These properties should be added to the permitted landfill area. The deeds for the properties purchased in 2022 are included in Appendix 1 of this Section.

A request to remove a 0.23 acre parcel from the Permitted Area to serve as a second tree and brush burn area at the site was submitted to IDNR on October 28, 2022 (Doc #104468). The parcel was removed from the Permitted Area in the SDP Permit revision dated November 16, 2022. This burn area is no longer used so the 0.23 acre parcel should be included back in the Permitted Area. Note that "Parcel B" (location of the initial tree and brush burn area) should still be omitted from the Permitted Area.

113.6(4)c Proof of Ownership

Documentation on property ownership, with the exception of the properties purchased in 2021 and 2022, was provided in the 2020 SECR (Doc #98643). The deeds for the properties purchased in 2021 and 2022 are included in Appendix 1 of this Section.

113.6(4)e Scaled Maps and Aerial Photographs

4. Haul routes to the facility. Gypsum Hollow Road is a paved two-lane road that runs generally north-south along the west property line of the facility. All traffic enters the site from Gypsum Hollow Road. There are no known load restrictions on Gypsum Hollow Road.

113.6(4)k Unstable Area Demonstration

A slip plane was noted in the closure cap in the SE Lateral Expansion Area in 2017. Since that time, the area has been monitored with minimal additional movement noted. IDNR has approved a methodology for remediation of the slip plane and repair of the cap in this area. A contractor has been retained to complete the remediation with the work scheduled to be finished during 2025.

The facility is not located near any documented coal mines and is not located in that portion of Iowa recognized as a karst terrain (Northeast Iowa).

The site is located in an area where both surface and subsurface gypsum mining has occurred in the past, and active and abandoned gypsum mines are located in the vicinity. Gypsum in the area was original subsurface mined. The subsurface mine shafts were later excavated out by surface mining prior to landfilling. It must be noted that records on the location and extent of underground mines are incomplete. Pages 4-5 of the "Soil and Hydrogeologic Investigation Report" dated January 2, 2013 by Terracon Consultants, Inc. (Doc #76121) states that "The current strip mine gypsum quarry operated by the North Central Iowa Regional Solid Waste Agency removed the last of the room and pillar mines known to exist in the area." Evidence of past mining activities exist in the current borrow area. If the borrow area is not excavated to below the base of the historic gypsum mining, additional explorations will be conducted to attempt to document the extent of the past underground mining. Any mine shafts encountered will need to be properly overexcavated, stabilized, or plugged. If mine shafts are discovered and will be left in place stability documentation will be submitted to IDNR prior to landfilling. Signs of mining activity observed during geotechnical investigations, excavation, or future construction must be investigated for the potential for subsidence.

It must be recognized that <u>any</u> sloping soil surface is subject to shallow surface creep behavior. These movements generally occur within the surface zone subject to frost penetration, water seepage near the ground surface, and erosion events. Surface creep behavior is not considered slope failure; however, general slope failure may occur despite reasonable stability measures if excessive creep is experienced.

APPENDIX 1

Number: 2021-02581
Recorded: 5/13/2021 at 1:57:22.0 PM
County Recording Fee: $22.00
Iowa E-Filing Fee: $3.63
Combined Fee: $25.63
Revenue Tax: $12.00
Lindsay Laufersweiler RECORDER
Webster County, Iowa

COURT OFFICER DEED
Recorder's Cover Sheet

Preparer Information:
G. Mark Rice, 699 Walnut Street, Suite 2000, Des Moines, Iowa 50309, Phone: (515) 288-6041

Taxpayer Information:
North Central Iowa Regional Solid Waste Agency, 2150 South 22nd Street, Fort Dodge, IA 50501

Return Document To:
North Central Iowa Regional Solid Waste Agency, 2150 South 22nd Street, Fort Dodge, IA 50501

Grantors:
Paul Juffer in his capacity as the court appointed receiver in *Steven Molstad and Quarry Services, Inc. v Wayne Krug and Gypsum Ag Supply, LLC* in the Iowa District Court for Webster County, Case No. LACV320274

Grantees:
North Central Iowa Regional Solid Waste Agency

Legal Description: See Page 2

Document or instrument number of previously recorded documents:

COURT OFFICER DEED

STEVEN MOLSTAD and QUARRY SERVICES, INC.,

Plaintiff,

v.

WAYNE KRUG and GYPSUM AG SUPPLY, LLC,

Defendants.

now pending in the Iowa District Court in and for Webster County. Case No. LACV320274

Pursuant to the authority and power vested in the undersigned, and in consideration of One Dollar and other valuable consideration, the undersigned, in the representative capacity designated below, hereby conveys to North Central Iowa Regional Solid Waste Agency the following described real estate in Webster County, Iowa:

A parcel of land being part of SE1/4 of the SE1/4 of Section 32, Township 89 North, Range 28 West of the 5th P.M., Webster County, Iowa, described as: Beginning at the Northwest Corner of the SE1/4 of the SE1/4 of said Section 32; thence N89°35'21"E along the North line of said SE1/4, 328.38 feet; thence S01°06'54"W, 300.54 Feet; thence S07°52'07"E, 221.68 Feet; thence S89°59'43"W, 352.83 Feet to the West line of said SE1/4; thence N00°00'17" W along said West line, 517.76 Feet to the point of beginning, except that portion lying West of county road right of way. Said parcel contains 3.94 acres including 0.67 acres of county road right of way and is subject to easements and restrictions of record. For the above legal description, the north line of said SE1/4 is assumed to bear N89°35'21"E.

Words and phrases herein, including acknowledgement hereof, shall be construed as in the singular or plural number, and as masculine, feminine or neutral gender, according to the context.

Dated: May 11, 2021.

By _____
Paul Juffer

As Receiver in the above entitled cause.

STATE OF IOWA , COUNTY OF Polk , ss:

This record was acknowledged before me on May 11, 2021, by Paul Juffer on behalf of said corporation as fiduciary.

Lynn Blass
Signature of Notary Public

LYNN BLASS
Commission Number 705774
My Commission Expires
9/28/2021

Number: 2022-06230
Recorded: 12/20/2022 at 11:14:53.0 AM
County Recording Fee: $22.00
Iowa E-Filing Fee: $3.00
Combined Fee: $25.00
Revenue Tax: $732.00
Lindsay Laufersweiler RECORDER
Webster County, Iowa

Preparer/Return To: Colin L Hendricks, 805 Central Ave #700, Ft. Dodge, IA 50501, 515-576-4127
Taxpayer: North Central Iowa Regional Solid Waste Agency, PO Box 578, Ft. Dodge, IA 50501

WARRANTY DEED

For the consideration of One Dollar(s) and other valuable consideration, **Melissa D. Grell, a/k/a Melissa D. Michehl,** a single person, does hereby Convey to **North Central Iowa Regional Solid Waste Agency** the following described real estate in Webster County, Iowa:

SEE ATTACHED EXHIBIT A

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is free and clear of all liens and encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

Dated: December 19, 2022.

Melissa D. Grell

Melissa D. Grell, a/k/a Melissa D. Michehl

STATE OF IOWA, COUNTY OF WEBSTER

This record was acknowledged before me on December 19, 2022 by Melissa D. Grell, a/k/a Melissa D. Michehl.

Signature of Notary Public

COLIN L. HENDRICKS
Commission Number 812818
My Commission Expires
September 21, 2024

EXHIBIT A

The South 250 feet of the West 1/2 of the NE 1/4 of the SE 1/4, Section 32, Township 89 North, Range 28 West of the 5th P.M., Webster County, Iowa

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 sent in to the IDNR for review prior to construction. Submittals to IDNR for new MSWLF units will include a Quality Control and Assurance Plan, subgrade settlement calculations where warranted, leachate generation calculations, 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 current scale license 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 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 with plans and specifications for new MSWLF units as warranted.

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 2020 Permit Renewal Documentation (Doc #98643) and are still applicable. The fill height used in the previous calculations is greater than future fill heights based on current design parameters. The 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 in the existing Subtitle D Composite Lined areas. Leachate head piezometers will also be installed in future disposal areas to monitor leachate head on the liner.

(4) Leachate recirculation over Subtitle D composite lined disposal areas (with the exception of the Subtitle D lined Abutment Area) has been approved; however, little leachate has been recirculated to date.

(5) Existing leachate collection piping in the Subtitle D compliant alternative and composite lined areas is 8 inches in diameter. The leachate collection pipe installed in future expansion areas will have a minimum diameter of 8 inches to allow cleaning activities to occur throughout the life of the pipe. Long radius bends and sweeps will be used at alignment changes as necessary to maintain access to the piping. Access is available on each end of the leachate collection piping in the Phase 1, Phase 2, and Phase 3 Expansion areas. Access is only available on the upgradient ends of the leachate collection pipes in the Subtitle D compliant alternative lined areas.

(6) The combination of the 8" diameter leachate collection pipe, the clean rock backfill in the leachate collection pipe trench, and the clean sand 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 levels are maintained. The leachate collection system is designed to limit leachate levels to less than 12" above the top of liner elevation to maintain low saturated leachate levels. The drainage layer will be covered with a Reinforced Landfill Cover upon installation to further reduce the possibility of elevated liquid levels in the drainage layer material. 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 high hydraulic-conductivity material at least 12 inches in depth with a hydraulic conductivity of at least $1x10^{-2}$ cm/sec. Clean sand will be used for the drainage layer in future construction, 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. Laboratory hydraulic conductivity and gradation tests will be submitted to IDNR in the final QC&A Report.

(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 and/or conveyance 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, bentonite/sand backfill, AquaBlok sealing compound, and other specialized backfill will be utilized to meet this requirement.

(11) Leachate collection piping was installed in the Subtitle D lined disposal areas during construction. Leachate collection in the Subtitle D compliant alternative lined areas consists of perforated 8" diameter piping installed in clean, highly permeable rock backfill. Whole tires and tire shreds were used for drainage layer in the Subtitle D compliant alternative lined disposal areas. Leachate collection in the Subtitle D composite lined areas consists of perforated 8" diameter HDPE piping installed in clean, highly permeable rock backfill. Clean sand was used for drainage layer in the Subtitle D composite lined disposal areas. The location of the leachate collection in the Subtitle D compliant lined disposal areas is shown on Figures 3 and 5 in Appendix 1 of this Section. Note that the leachate collected from the different areas is not metered separately so there is no practical way to determine how many gallons of leachate are being collected from each area.

Leachate collection piping will be installed in all future Subtitle D composite lined disposal areas. Leachate collection in future disposal areas will consist

of perforated 8" diameter HDPE piping installed in clean, highly permeable river rock backfill with a clean sand drainage layer.

All leachate collected is conveyed to a leachate pump station located east of the Phase 1 Expansion Area. From the leachate pump station, leachate is pumped through a single walled (within Subtitle D compliant lined landfilling areas) or dual walled (outside of Subtitle D compliant lined landfilling areas) HDPE force main to the leachate/wastewater pump station north of the Scale Office building. From the leachate/wastewater pump station, leachate is pumped to the Fort Dodge Sanitary Sewer System for treatment and disposal at the City of Fort Dodge POTW. The current Industrial User Wastewater Discharge Permit with the City of Fort Dodge is included in Appendix 4 of this Section. The Discharge Permit expires on December 31, 2025. An application for a new permit was submitted to US Water on June 17, 2025.

In accordance with correspondence with IDNR, if leachate is conveyed directly to a sanitary sewer system the leachate storage required by this subrule is not applicable.

Leachate generation calculations for the Phase 3 Expansion, which included estimated contributions from the Subtitle D composite and the Subtitle D compliant alternative lined areas, were submitted to IDNR on March 6, 2024 (Doc #109438) and approved by IDNR in the SDP Permit Revision dated April 24, 2024. Leachate collection volumes will be revisited at least annually (in the Annual Groundwater Quality Report). The leachate generation rates and calculations will also be reviewed and updated as needed prior to the construction of any additional disposal areas.

(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 for the facility.

113.7(6) Quality Control and Assurance Programs

A general Quality Control and Assurance (QC&A) Plan is contained 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 includes some disposal capacity in the Abutment Liner Area over existing unlined MSWLF units. The Abutment Liner Area was constructed with a Subtitle D composite liner in accordance with 113.7(5)"a"(1).

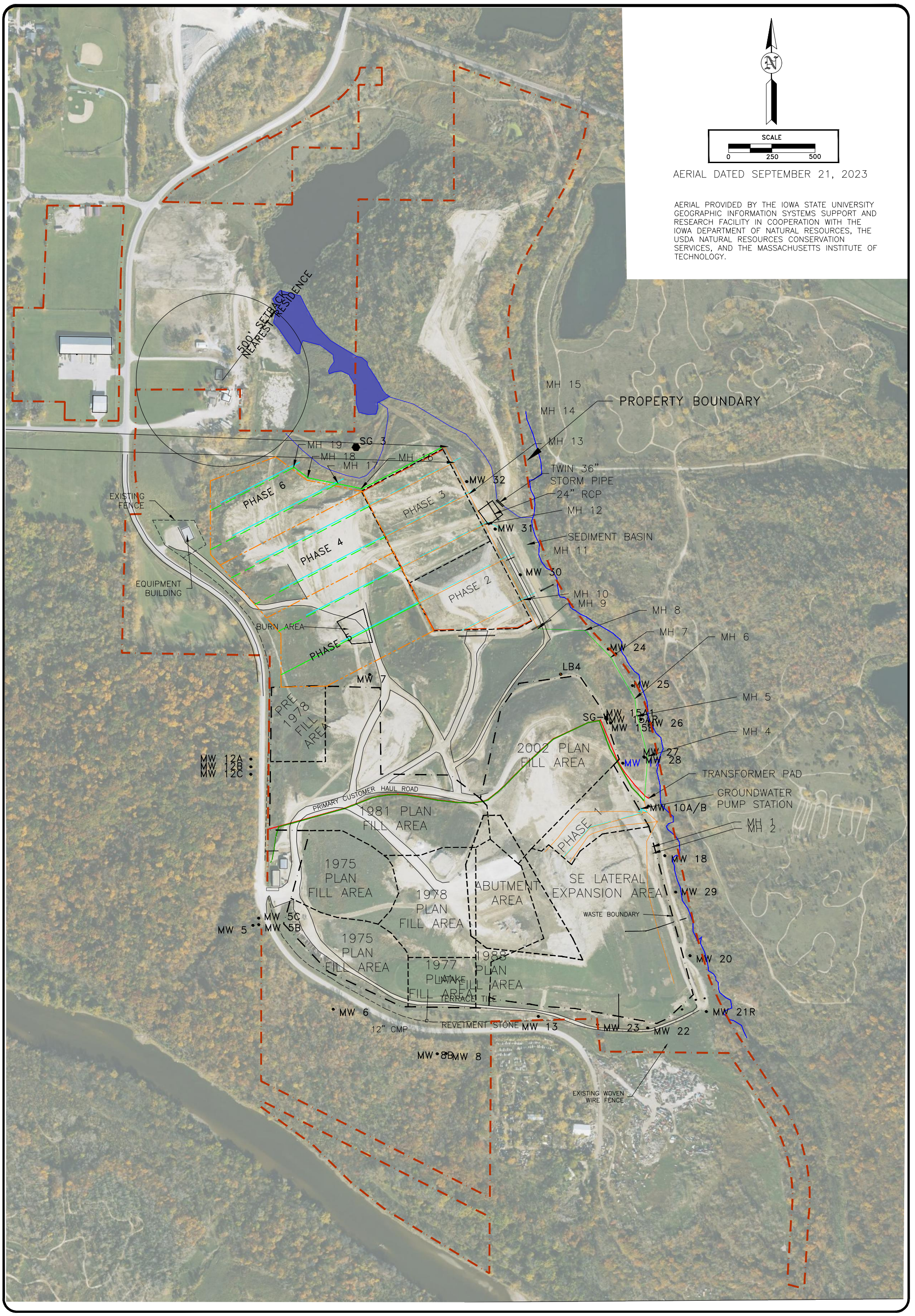
113.7(8) Run-on and Runoff Control Systems

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, drop pipes, sediment basins, and other 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



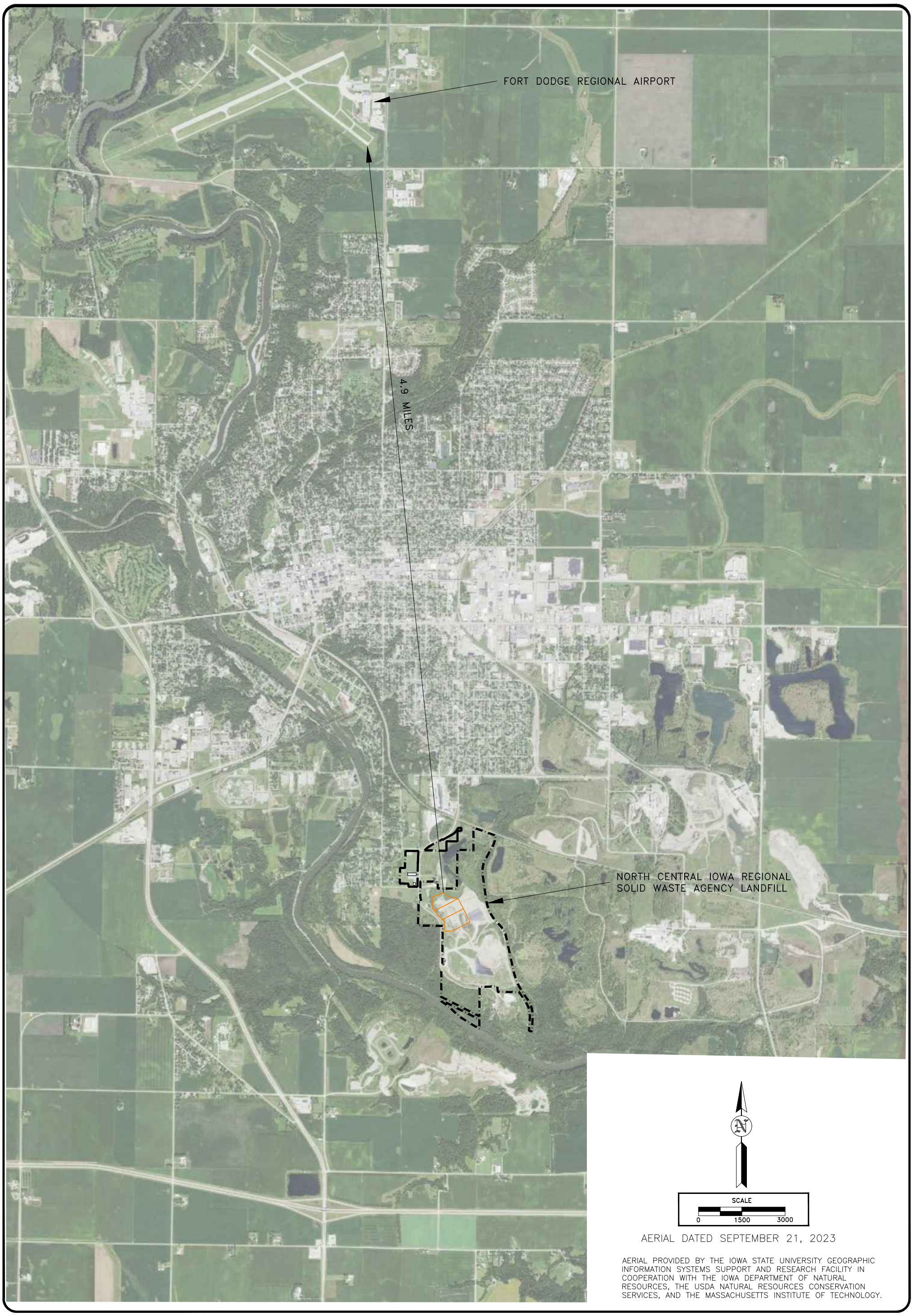
HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146

AERIAL VIEW
2025 PERMIT RENEWAL

NORTH CENTRAL IOWA REGIONAL SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 1

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-25A	DATE 6/11/25



AERIAL DATED SEPTEMBER 21, 2023

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.

HLW Engineering Group
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FAX: (515) 733-4146

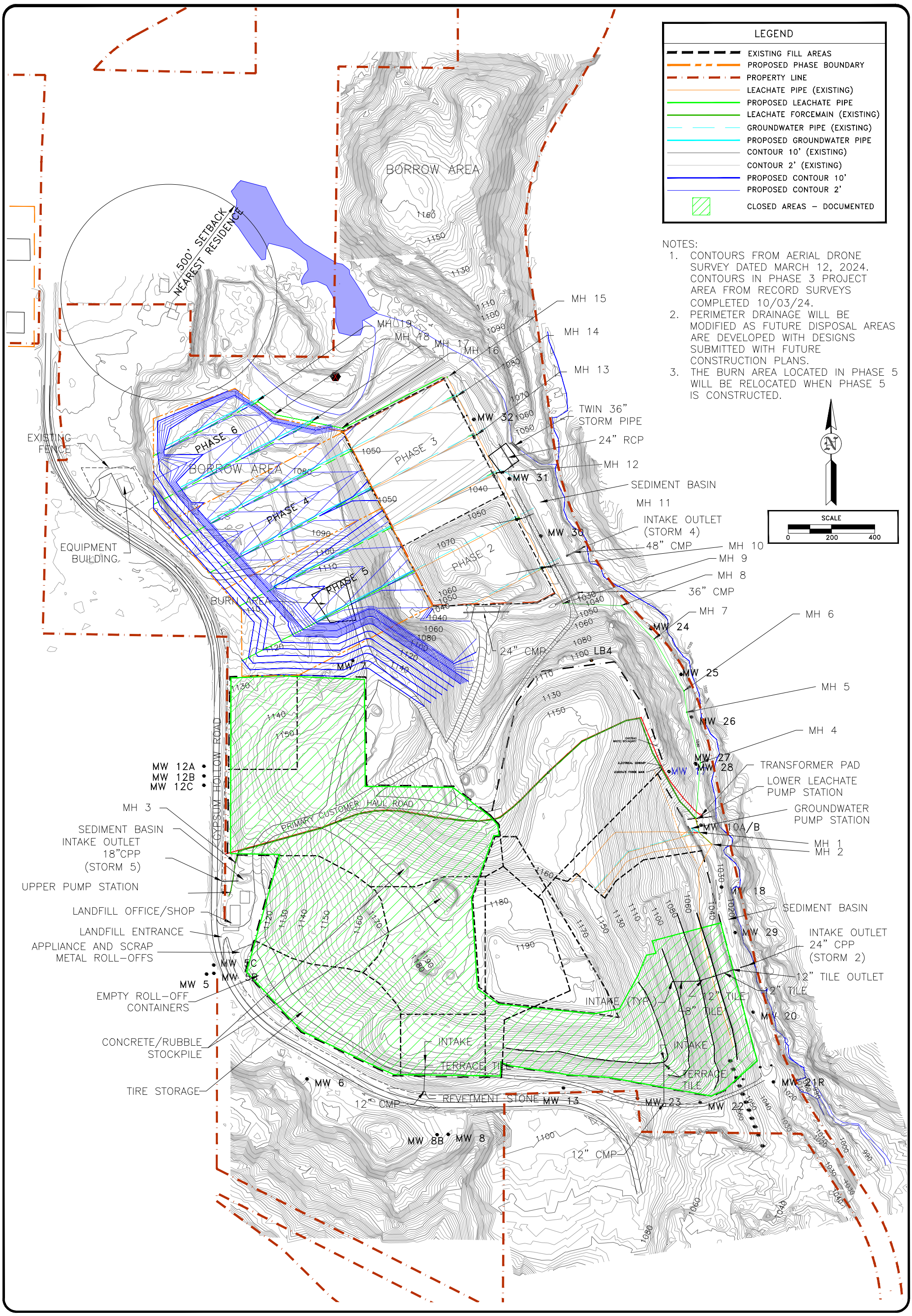
AIRPORT LOCATION

2025 PERMIT RENEWAL

NORTH CENTRAL IOWA REGIONAL SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 2

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-25A	DATE 7/11/25



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FAX: (515) 733-4146

OVERALL SITE PLAN

2025 PERMIT RENEWAL

NORTH CENTRAL IOWA REGIONAL SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 3

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-25A	DATE 7/11/25

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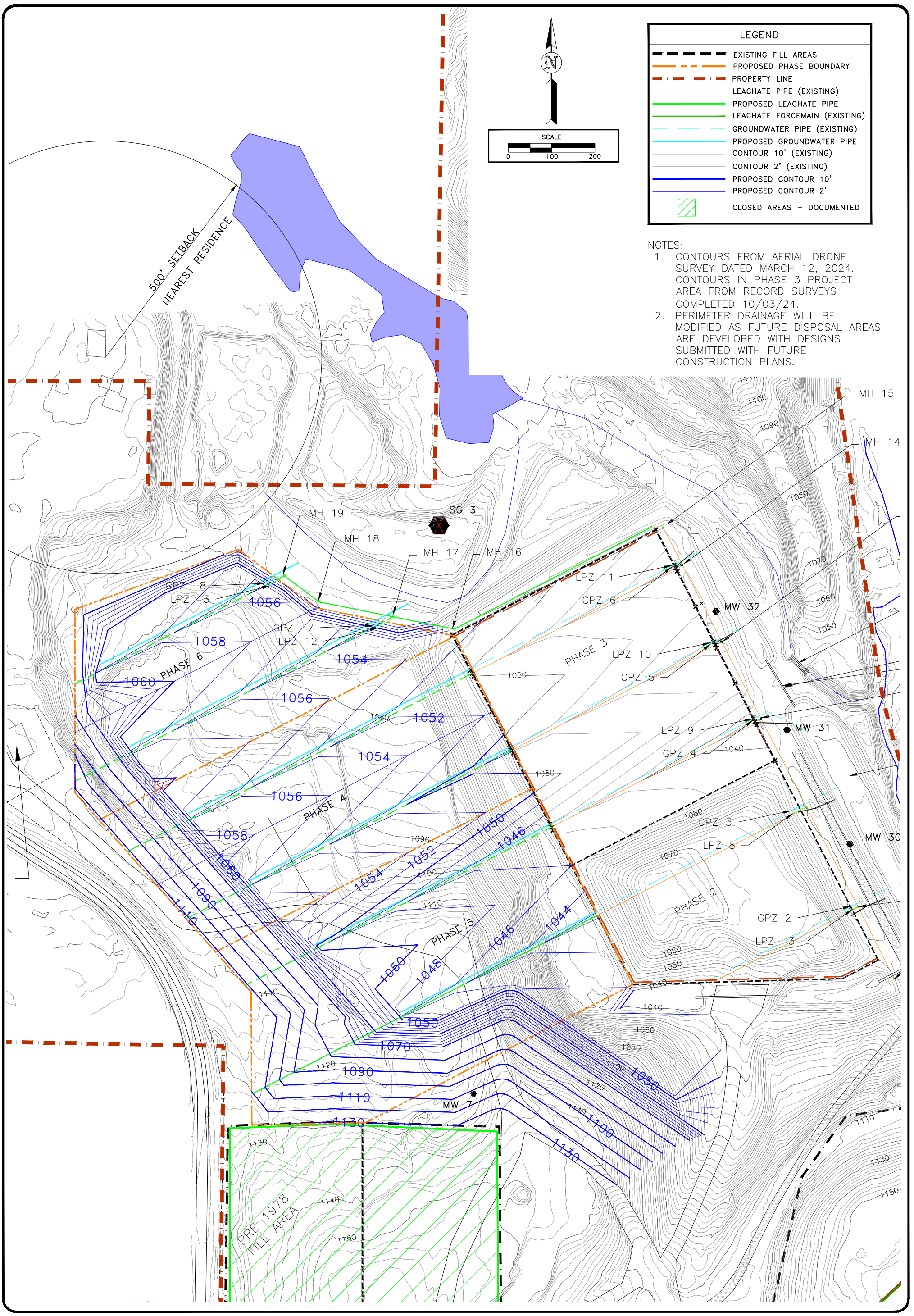
OVERALL SITE PLAN
TOPOGRAPHY WITHIN 1/2 MILE
2025 PERMIT RENEWAL
NORTH CENTRAL IOWA REGIONAL SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 4

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-25A	DATE 7/11/25



NOTES:

1. CONTOURS FROM AERIAL DRONE SURVEY DATED MARCH 12, 2024. CONTOURS IN PHASE 3 PROJECT AREA FROM RECORD SURVEYS COMPLETED 10/03/24.
2. PERIMETER DRAINAGE WILL BE MODIFIED AS FUTURE DISPOSAL AREAS ARE DEVELOPED WITH DESIGNS SUBMITTED WITH FUTURE CONSTRUCTION PLANS.

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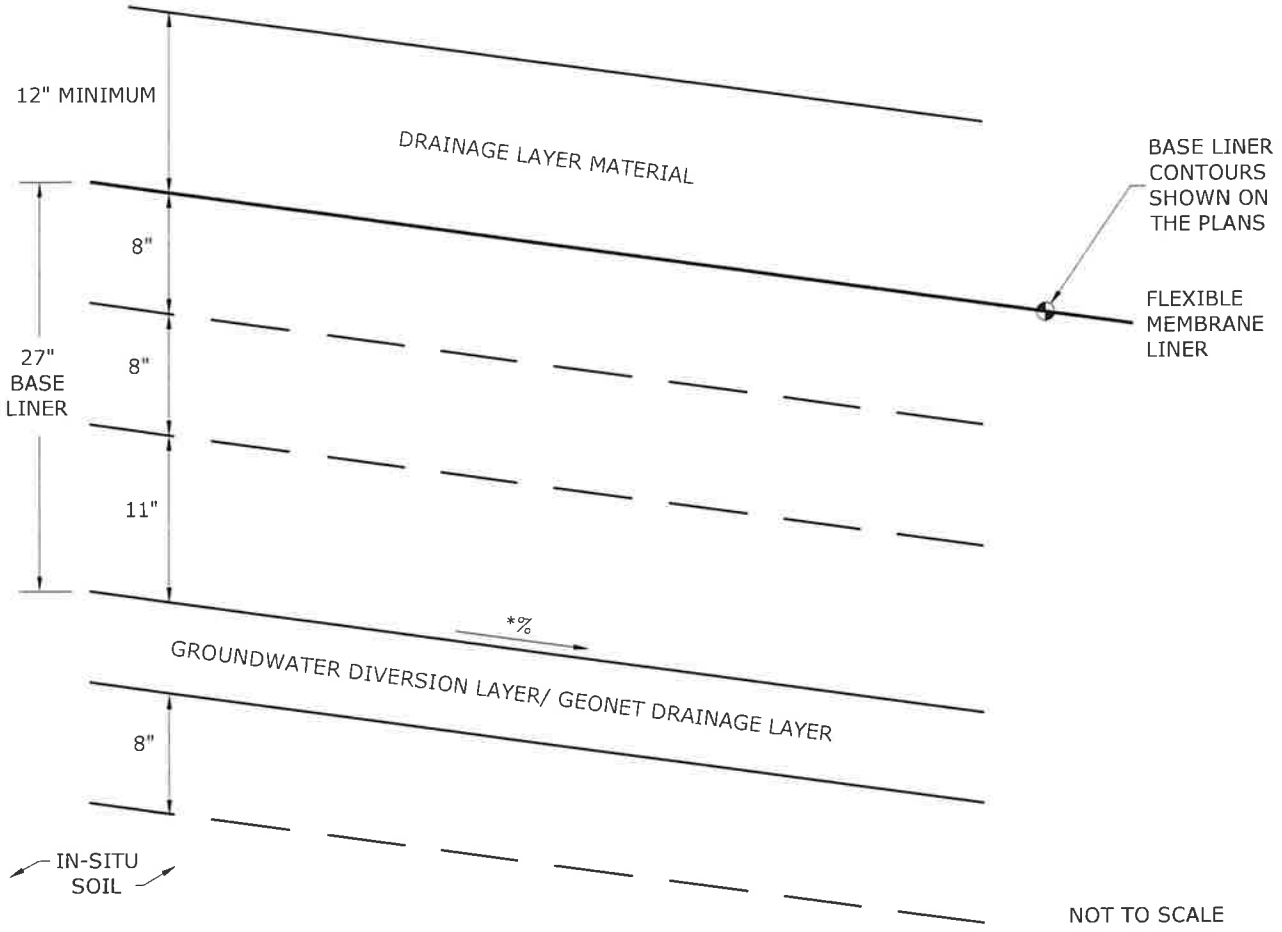
SITE PLAN – LANDFILL DEVELOPMENT

2025 PERMIT RENEWAL

NORTH CENTRAL IOWA REGIONAL SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 5

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030–25A	DATE 7/11/25



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 $\leq$ 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 ($\leq$ 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 $\geq$ 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.

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BASE LINER CONSTRUCTION
2025 PERMIT RENEWAL

NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 6

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030−25A	DATE 7/11/23

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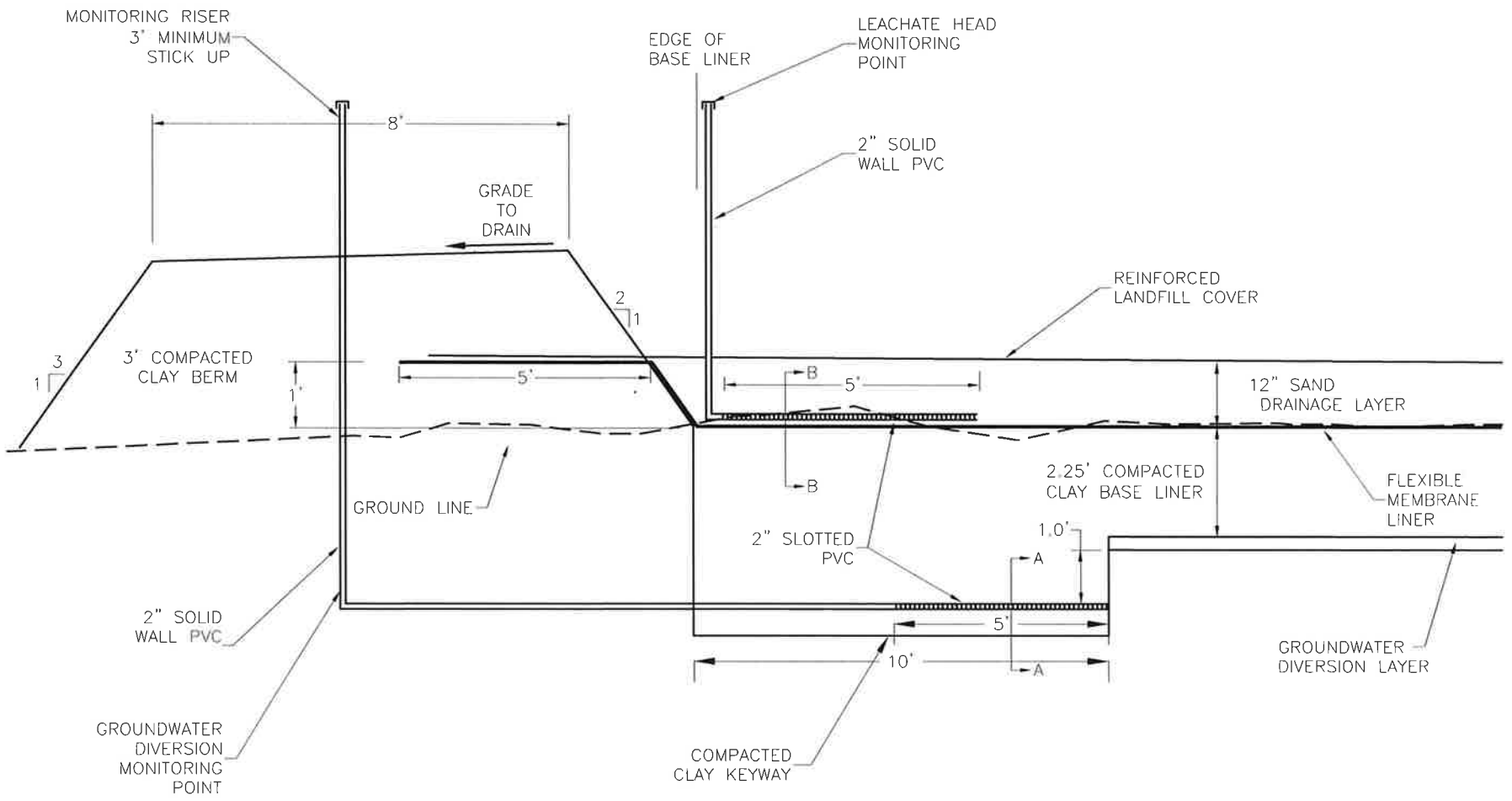
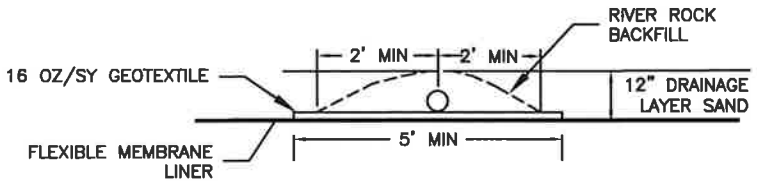
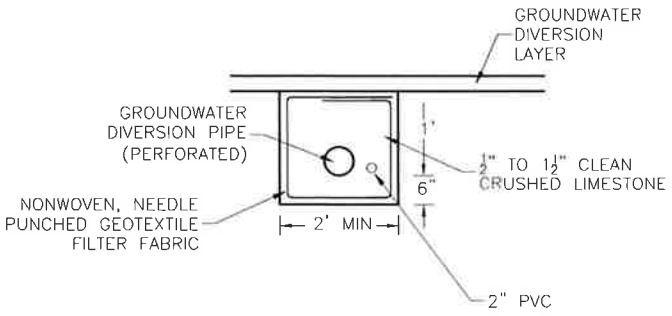
GROUNDWATER AND LEACHATE HEAD MONITORING POINTS 2025 PERMIT RENEWAL

NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA





SECTION B–B



SECTION A–A

FIGURE: 7

REVISION	NO.	DATE

DRAWN	PROJECT NO.	DATE
JGH	6030-25A	7/10/25

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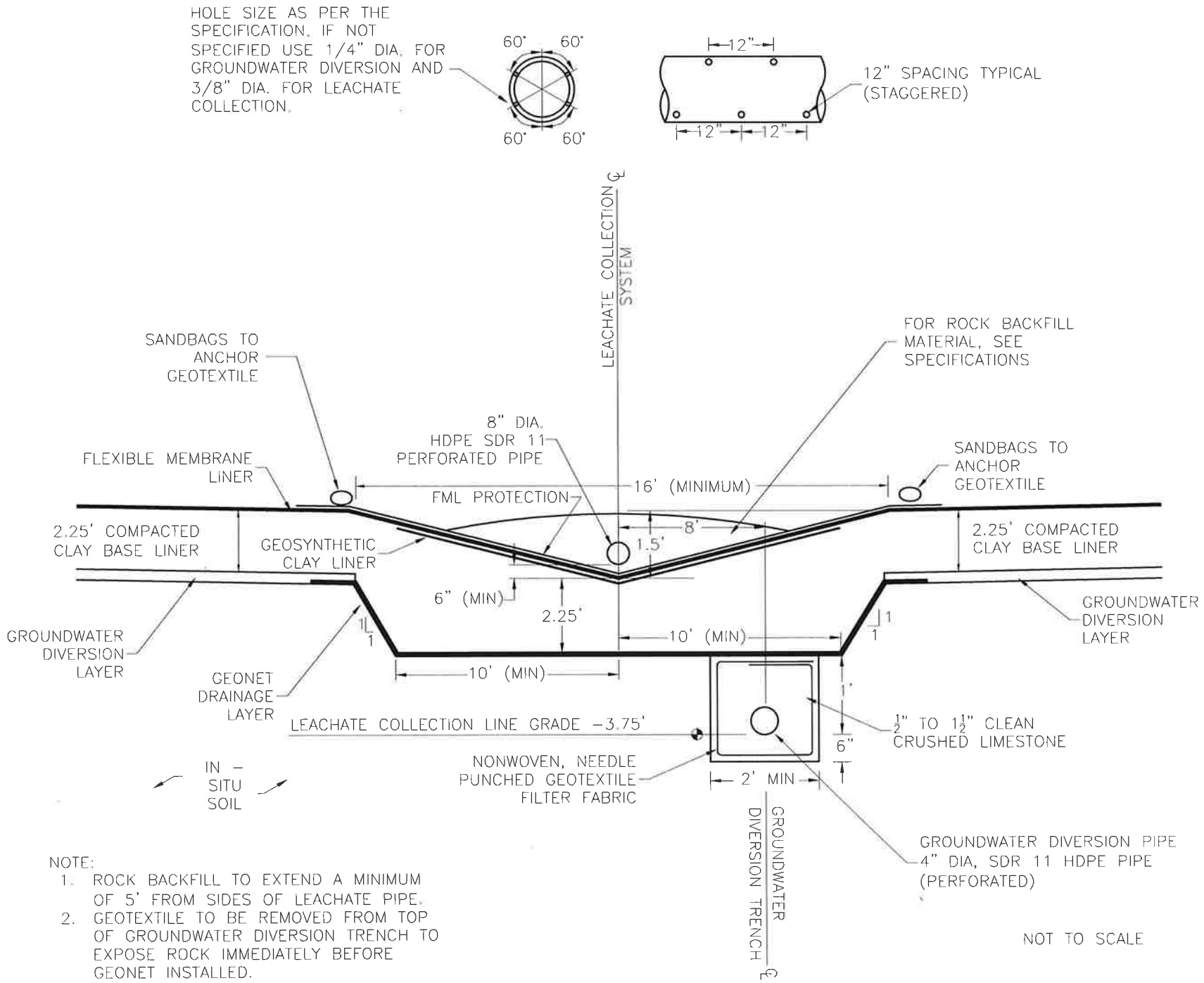
TYPICAL PIPE CROSS SECTION

LANDFILL BASE
2025 PERMIT RENEWAL
NORTH CENTRAL IOWA REGIONAL SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 8

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-23C	DATE 7/10/25



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.

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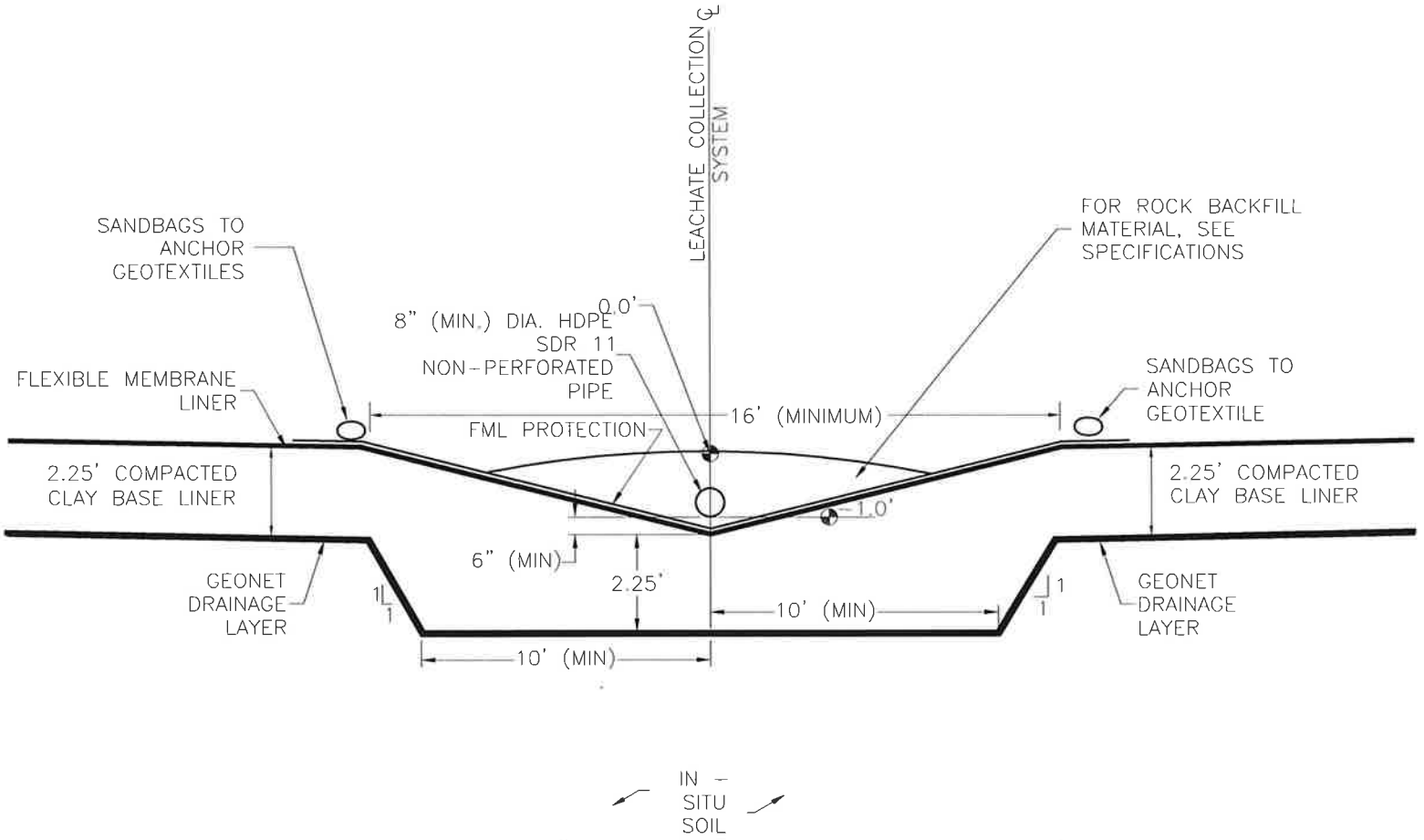
TYPICAL PIPE CROSS SECTION
LANDFILL SIDESLOPE
2025 PERMIT RENEWAL

NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA



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

NOT TO SCALE

FIGURE: 9

REVISION	NO.	DATE

DRAWN	PROJECT NO.	DATE
JGH	6030-25A	7/11/25

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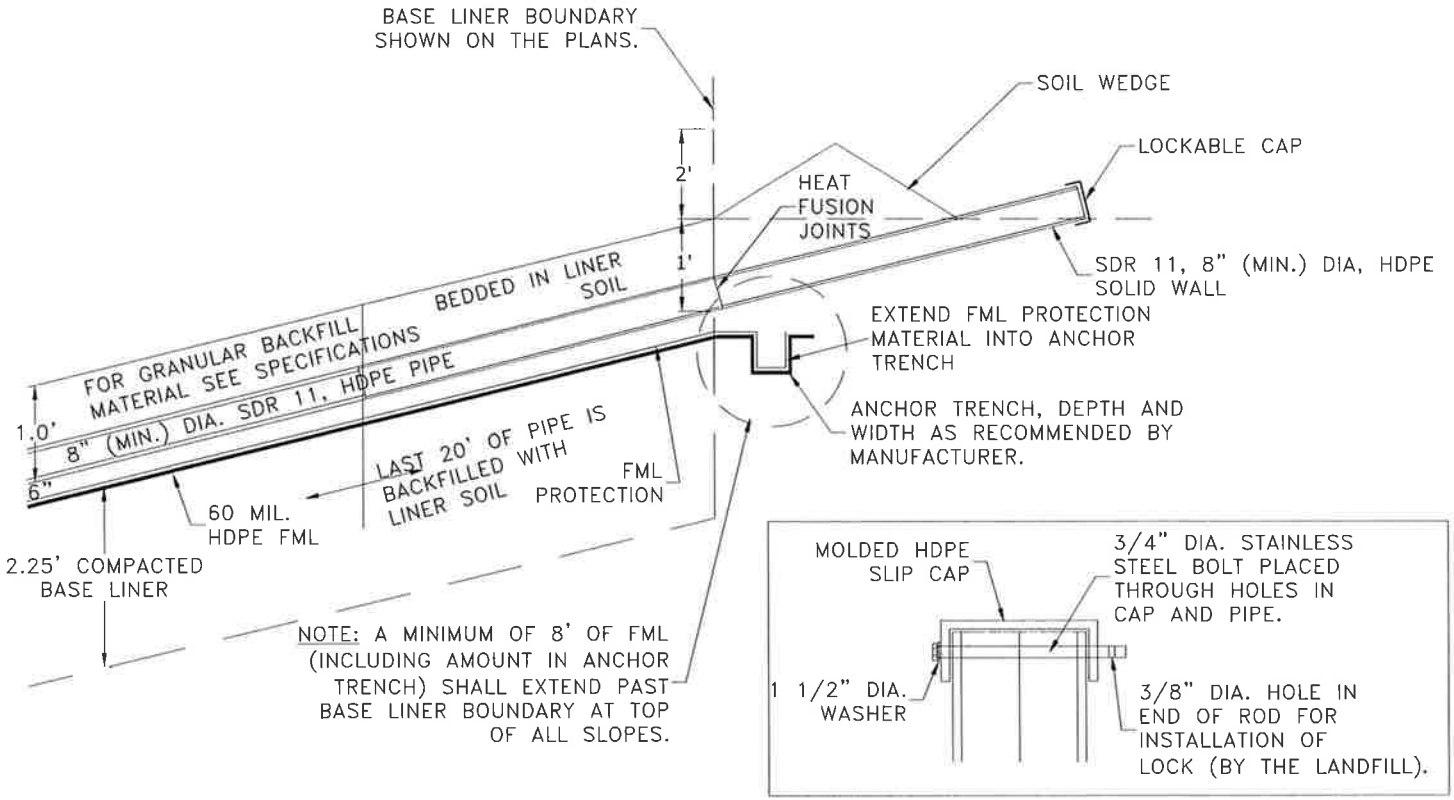
SIDEWALL ACCESS POINT

2025 PERMIT RENEWAL

NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

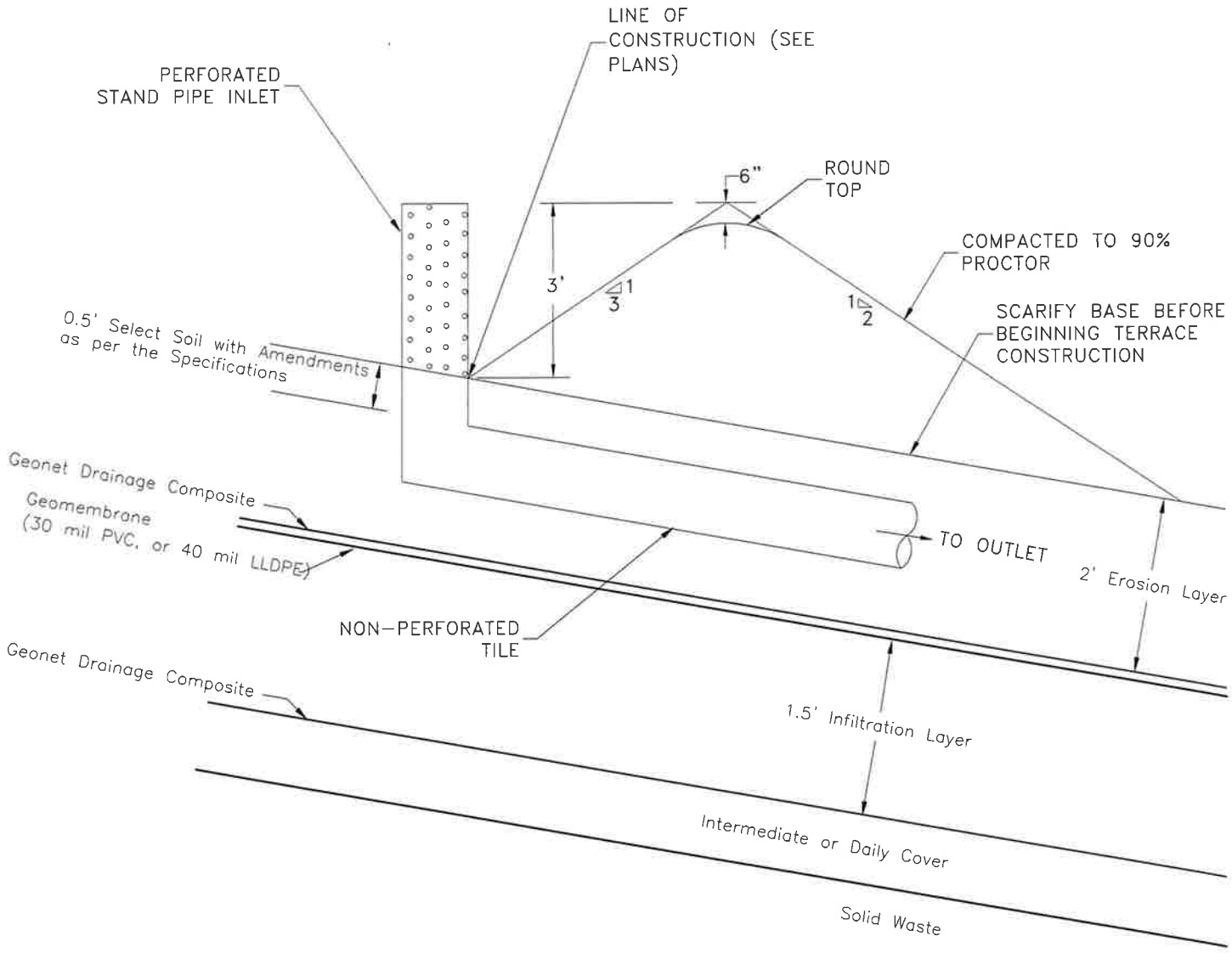


NOT TO SCALE

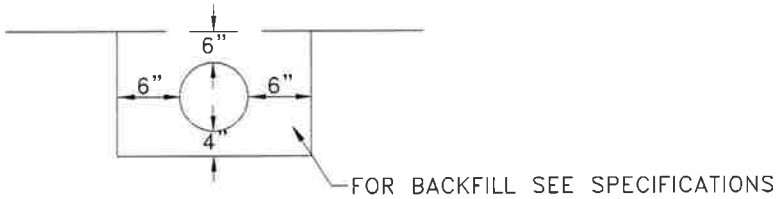
FIGURE: 10

REVISION	NO.	DATE

DRAWN	PROJECT NO.	DATE
JGH	6030-25A	7/11/25



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



PIPE BEDDING DETAIL
NO SCALE

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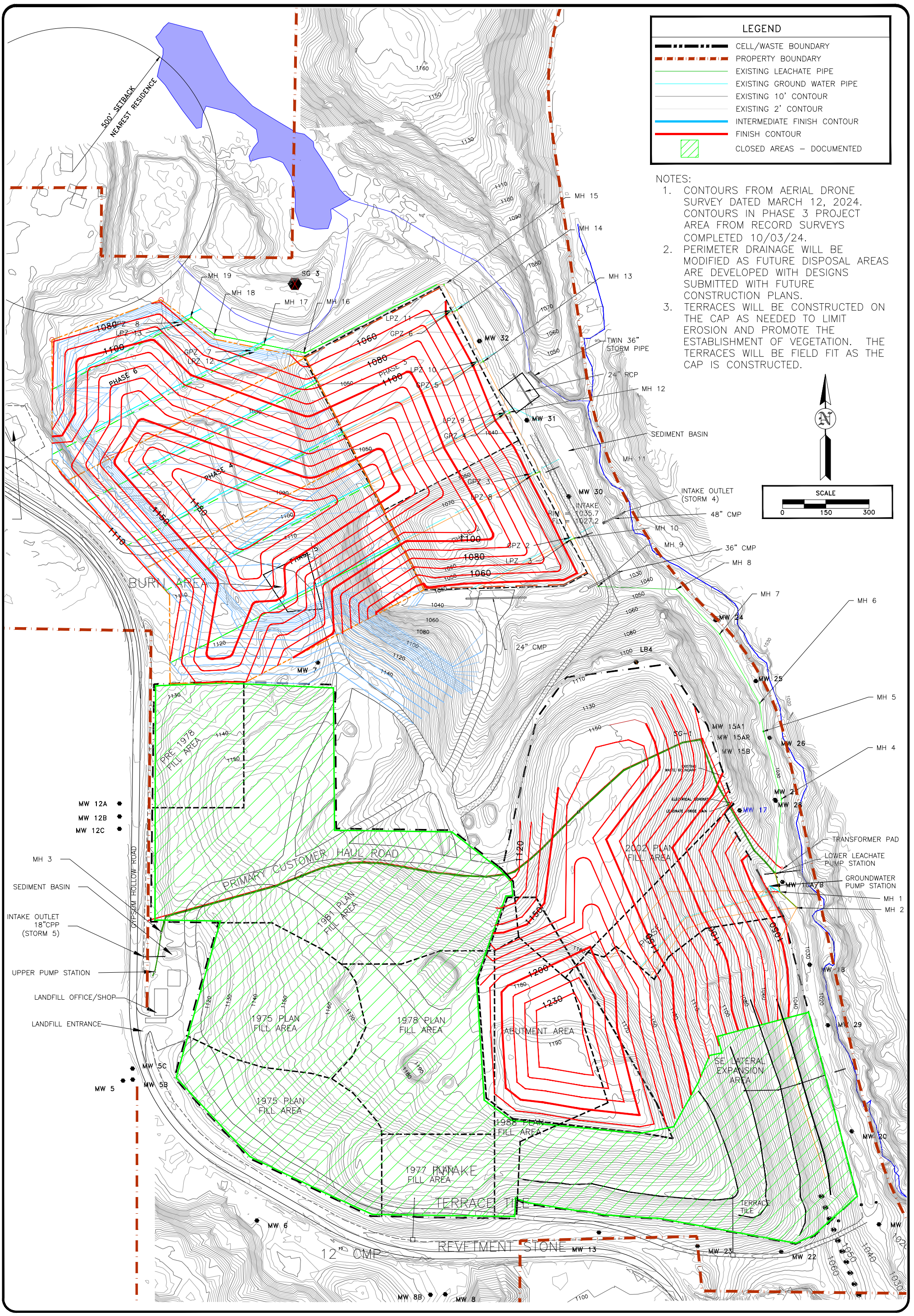
TYPICAL TERRACE CROSS SECTION
2025 PERMIT RENEWAL

NCIRSWA SANITAARY LANDFILL
FORT DODGE, IOWA

FIGURE: 11R

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-25A	DATE 9/25/25



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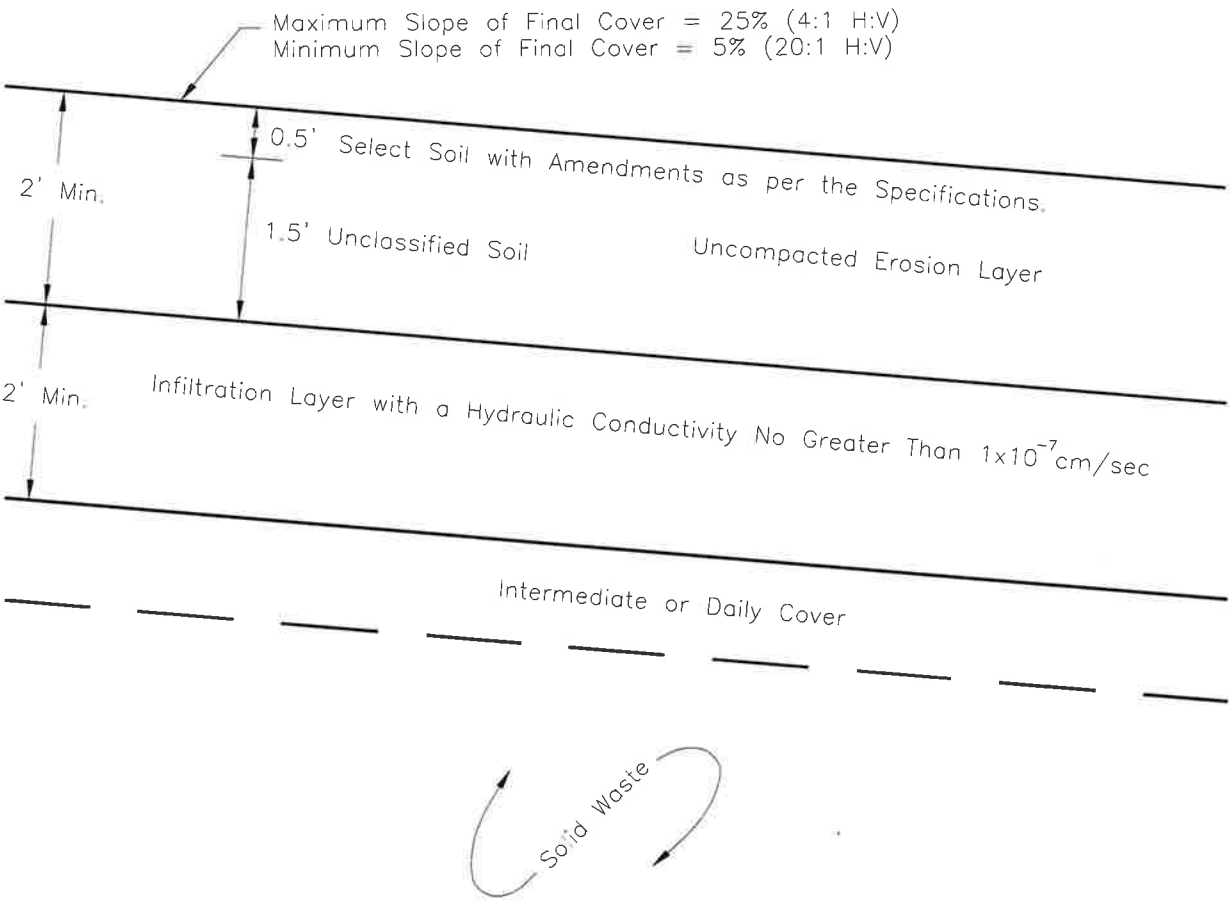
FINAL CONTOURS PLAN
2025 PERMIT RENEWAL
NORTH CENTRAL IOWA REGIONAL SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 12

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-25A	DATE 7/11/25



CONSTRUCTION AND MATERIAL NOTES:

- The Engineer shall determine the suitability of soil for use in the infiltration layer based on the results of laboratory hydraulic conductivity tests.
- 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.

NOT TO SCALE

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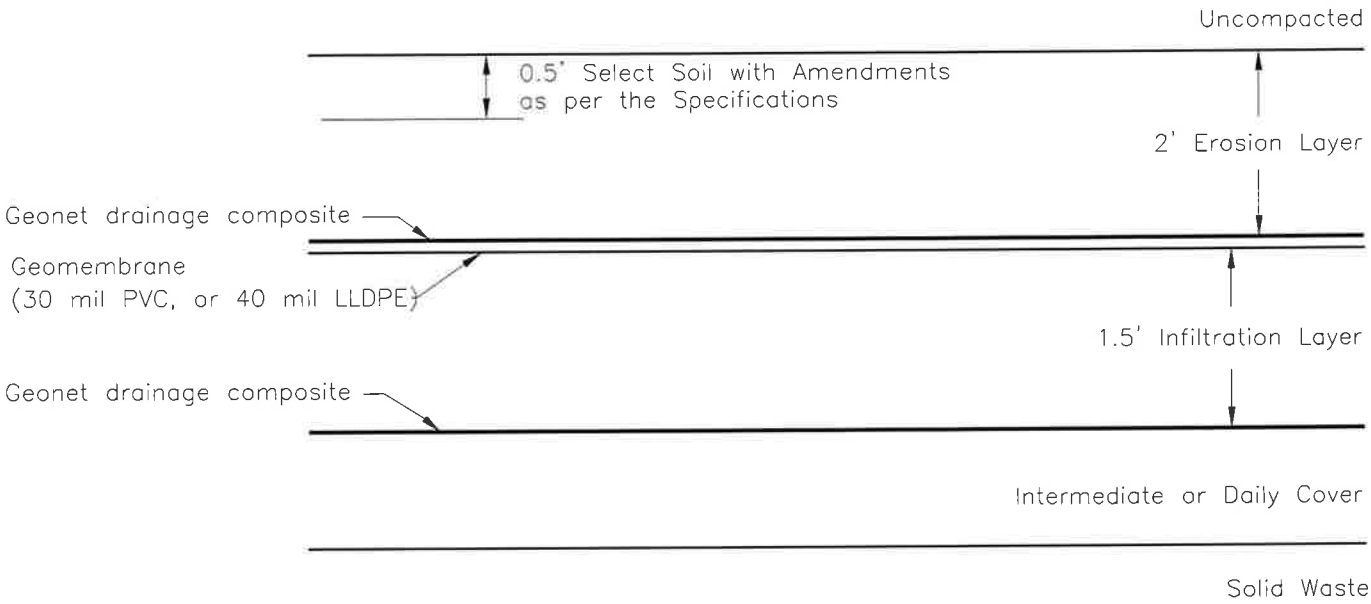
FINAL COVER DETAIL ALTERNATIVE CAP
2025 PERMIT RENEWAL

NCIRSWA SLF, FORT DODGE, IOWA

FIGURE: 13

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-25A	DATE 7/11/25



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 16R.
- 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

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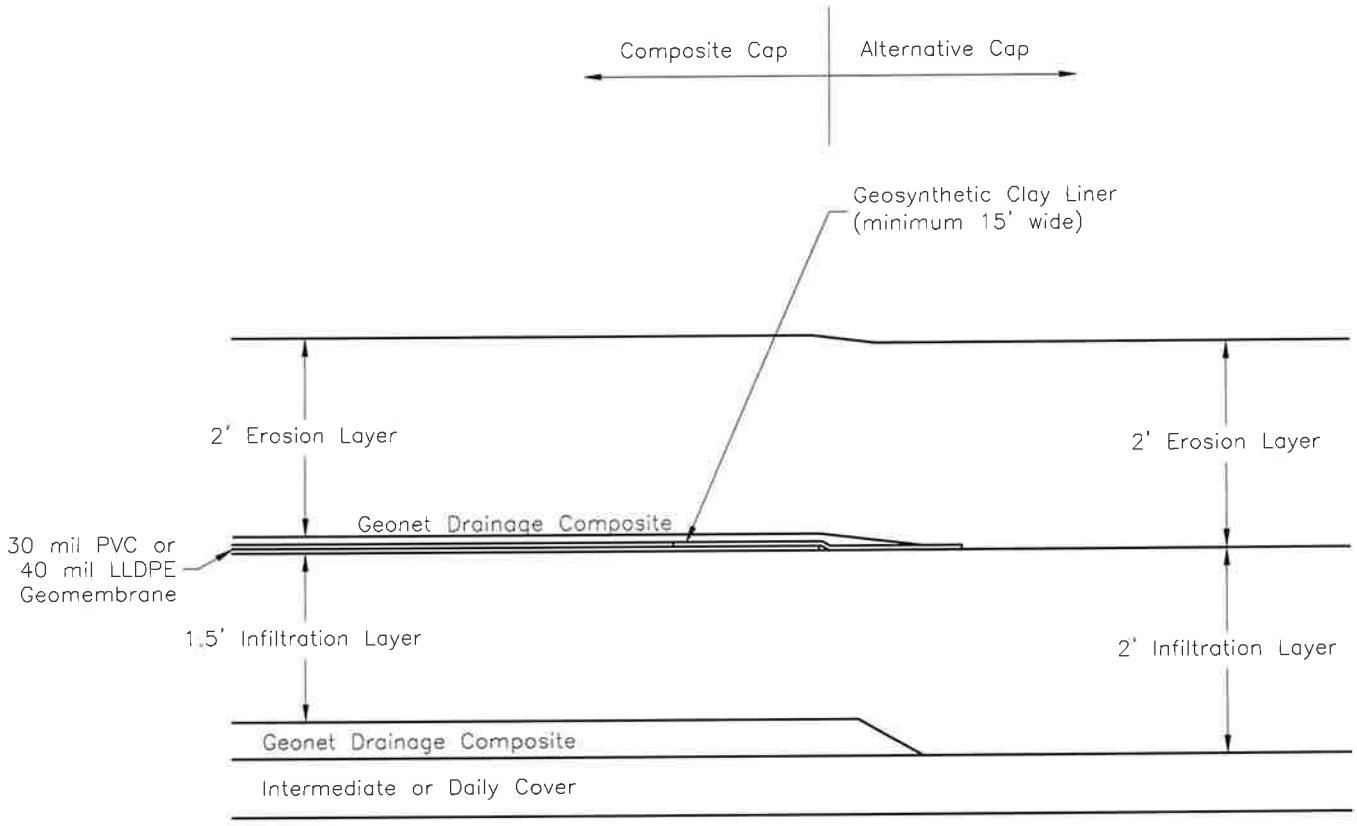
FINAL COVER DETAIL
COMPOSITE CAP
2025 PERMIT RENEWAL
NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 14R

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-25A	DATE 9/25/25



Notes:

1) Composite cap/soil cap joints will be located to maintain drainage in geonet drainage composite.

2) Protect edge of geomembrane with GCL as shown above. Purpose of GCL is to eliminate possibility of water migrating under geomembrane. GCL will also protect composite cap/soil cap joint. GCL to be installed directly on top of geomembrane.

3) Locations of construction joints, if needed, will be determined during final design.

NOT TO SCALE

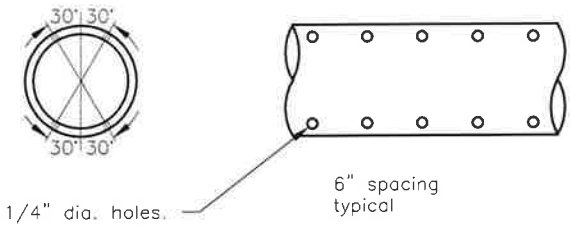
HLW Engineering Group

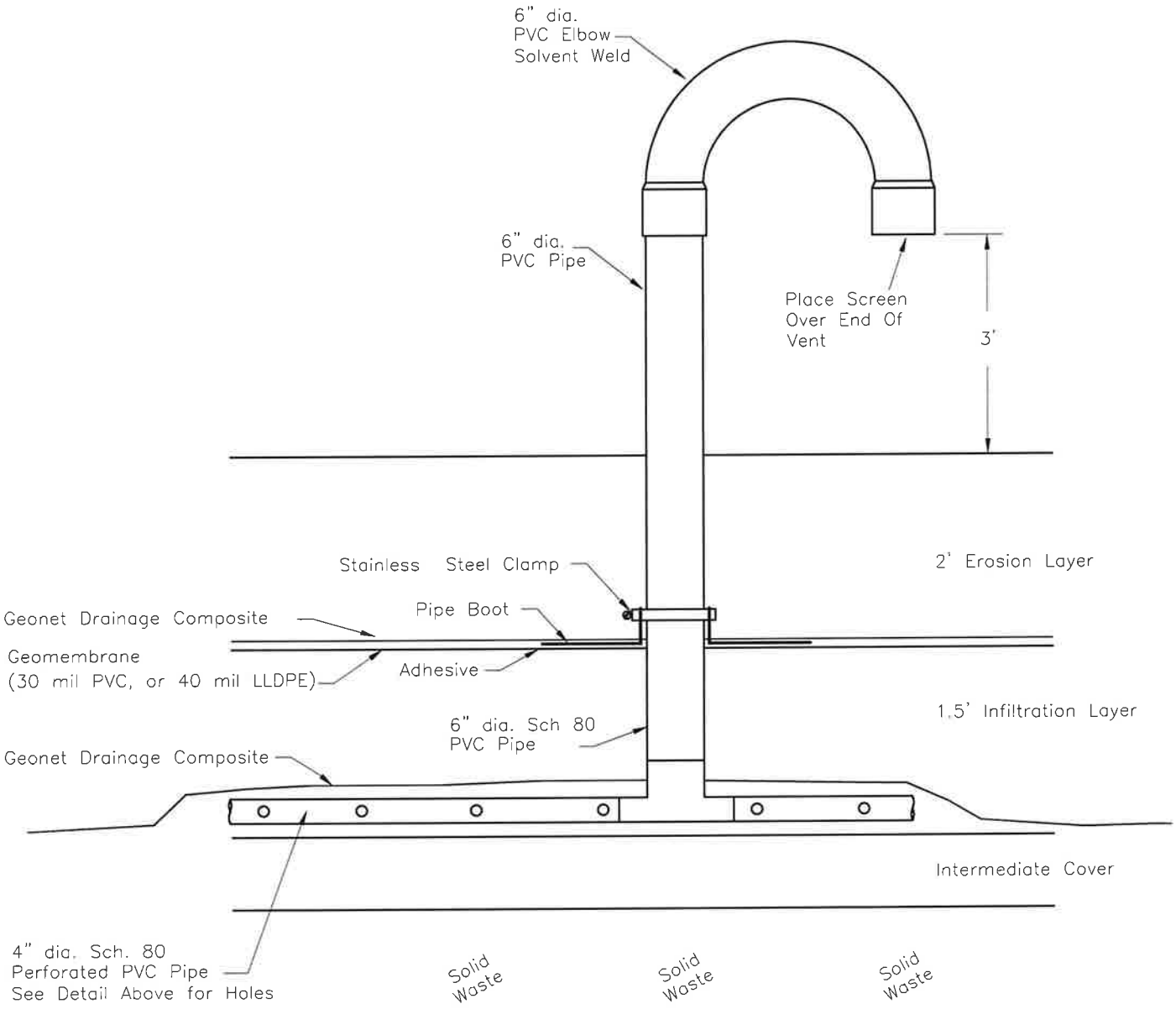
COMPOSITE TO ALTERNATIVE CAP CONSTRUCTION JOINT DETAIL 2025 PERMIT RENEWAL

NCIRSWA SLF, FORT DODGE, IOWA

FIGURE: 15R

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-25A	DATE 9/25/25





NOT TO SCALE

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GAS VENT DETAIL

2025 PERMIT RENEWAL

NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 16R

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-25A	DATE 9/25/25

APPENDIX 2

POST IN CONSPICUOUS PLACE

NONTRANSFERABLE

STATE OF IOWA

DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

DES MOINES

SCALE LICENSE

License No. 1794
NORTH CENTRAL IA REGIONAL SWA
2151 GYPSUM HOLLOW ROAD
FORT DODGE IA 50501

SCALE LOCATION
REGIONAL LANDFILL
2240 SOUTH 22ND STREET
FORT DODGE IA 50501

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 11/25/2024

EXPIRATION DATE
12/31/2025

This license is non-transferable and non-refundable

Mike Naig

SECRETARY OF AGRICULTURE

TYPE OF DEVICE	--- NUMBER
0 THRU 500 LBS	0
501 THRU 5000 LBS	0
5001 THRU 50000 LBS	0
50001 THRU 120000 LBS	1
OVER 120000 LBS	0
MOISTURE METERS	0
COUNTY	94

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.

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 x 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 5% 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 NCIRSWA 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

FORT DODGE

INDUSTRIAL USER WASTEWATER DISCHARGE PERMIT

CITY OF FORT DODGE, IOWA

Name / Address of Permittee	Location of Facility
North Central Iowa Regional Solid Waste Agency	North Central Iowa Regional Solid Waste Agency
2150 South 22nd Street	2150 South 22nd Street
Fort Dodge, IA 50501	Fort Dodge, IA 50501

SIC Code:	4953 – REFUSE SYSTEMS
Permit Number:	NCSIU-2021-05
Issue Date:	January 1, 2021
Expiration Date:	December 31, 2025
Renewal Application Date:	July 1, 2025

Permit term shall not exceed five (5) years post issue date, per 40 CFR 403.8(f)(1). This permit is issued for a period of five (5) years.

Renewal application must be received in the Pretreatment Office at least 180 days prior to expiration, per City Code 13.24.270.

The City of Fort Dodge hereby authorizes the above-named Permittee to discharge wastewater into the City's sanitary sewer system in accordance with the effluent limitations, monitoring requirements, and other terms set forth in this permit. The Permittee will be responsible for providing appropriate wastewater pretreatment and wastewater monitoring facilities as required to comply with this permit.

This permit is issued pursuant to City Code Section 13.24.250, City Ordinance No. 1863, Iowa Administrative Code [567] Chapter 62, and Title 40, Part 403 of the Code of Federal Regulations. The permit is non-transferable and shall not be sold or reassigned to a new owner or different user without

prior approval from the City as per City Code Section 13.24.275. The City reserves the right to modify this permit for good cause at any time as provided in City Code Section 13.24.260.

Compliance with this permit does not relieve the Permittee from its obligation to comply with other applicable regulations under local, state, or federal laws, including any such regulations or laws that may become effective during the term of this permit. Noncompliance with any term or condition of this permit shall constitute a violation of City Ordinance No. 1863 and may result in revocation of the permit as provided in City Code Section 13.24.315.

Authorized by: _____ Date: 1/13/2021
David Fierke, City Manager, City of Fort Dodge, IA

Authorized by: _____ Date: 1/14/2021
Mitzi Brunsvold, Signatory Authority, NCIRSWA

1. DESCRIPTION OF FACILITY AND PRETREATMENT PROCESS

The North Central Iowa Regional Solid Waste Agency (NCIRSWA) operates a landfill with leachate collection. The leachate gravity flows from the waste to a lift station which pumps it to a manhole. The manhole, which also receives domestic wastewater from the office/shop facilities, drains to a small lift station that pumps the waste to the POTW.

2. DISCHARGE LOCATION

Effluent Sampling Station

3. CLASSIFICATION OF FACILITY (check one)

☒ **Non-Categorical Significant Industrial User (NCSIU).** Includes users that discharge an average of 25,000 gallons per day or more of process wastewater to the City's wastewater treatment plant; users with waste streams that make up 5 percent or more of the hydraulic or organic load capacity of the City's wastewater treatment plant; and any other users determined by the City to have a reasonable potential for adversely affecting the City's wastewater treatment plant or for violating any pretreatment standard.

☐ **Categorical Industrial User (CIU).** Includes users subject to Categorical Pretreatment Standards per 40 CFR 403.6. Specific categories are listed in 40 CFR Parts 405-471.

☐ **Middle Tier Categorical Industrial User.** Includes categorical users designated by the City as a middle tier CIU per 40 CFR 403.12(e)(3). To qualify, the user's discharge must be less than 5,000 gpd and must not exceed 0.01 percent of the hydraulic, organic, or pollutant load capacity of the City's wastewater treatment plant. In addition, the user must not have been in significant noncompliance at any time in the past two years and must not have significant variations in flows or pollutant levels that would cause unrepresentative data during the reporting period.

☐ **Non-Significant Categorical Industrial User (NSCIU).** Includes categorical users designated by the City as a non-significant CIU per 40 CFR 403.3(v)(2). To qualify, the user must never discharge more than 100 gallons per day of categorical wastewater (excludes sanitary, non-contact cooling, and boiler blowdown wastewater unless specifically included in the categorical standard). In addition, the user must have consistently met all applicable pretreatment standards; and must never discharge any untreated concentrated wastewater; and must submit an annual certification per 40 CFR 403.12(q).

4. CATEGORICAL PRETREATMENT STANDARDS

This facility is subject to the following Categorical Pretreatment Standards:

National Categorical Pretreatment Standard	Code Section of 40 CFR Rules
N/A	

5. EFFLUENT LIMITATIONS

You are prohibited from discharging wastewater to the City's wastewater collection system and treatment plant except in compliance with the following effluent limits:

Conventional Pollutant Effluent Limitations

Parameter	30-Day Average	Daily Maximum	Location
Flow	0.00936 MGD	0.02400 MGD	Effluent Sampling Station
BOD	50.0 lb/day	150 lb/day	Effluent Sampling Station
TSS	72.0 lb/day	180 lb/day	Effluent Sampling Station
Ammonia Nitrogen (NH_3)	14.4 lb/day	21.6 lb/day	Effluent Sampling Station
pH	NA	5.5 – 9.5 S.U.	Effluent Sampling Station
Fats, Oils, and Greases (FOG)	150 mg/L	200 mg/L	Effluent Sampling Station

Concentrations of BOD5, TSS, Ammonia Nitrogen, and Fats, Oils, and Greases in excess of the limits are subject to surcharge fees per City Code Chapter 13.12.

NOTE: Permittee must also comply with the "Prohibited Discharge Standards" in City Code 13.24.180 and "Local Limits" for metals and other specific pollutants in City Code 13.24.210.

Local Limits Effluent Limitations

Parameter	30-Day Average (lb/day)	Daily Maximum (lb/day)	Location
Mercury	0.0004	0.0006	Effluent Sampling Station
Zinc	0.2737	0.4147	Effluent Sampling Station
Chlorides**	*Will monitor compliance with 13.24.210	*Will monitor compliance with 13.24.210	Effluent Sampling Station
Arsenic	*Will monitor compliance with 13.24.210	*Will monitor compliance with 13.24.210	Effluent Sampling Station
Cadmium	*Will monitor compliance with 13.24.210	*Will monitor compliance with 13.24.210	Effluent Sampling Station
Lead	*Will monitor compliance with 13.24.210	*Will monitor compliance with 13.24.210	Effluent Sampling Station
Molybdenum	*Will monitor compliance with 13.24.210	*Will monitor compliance with 13.24.210	Effluent Sampling Station
Selenium	*Will monitor compliance with 13.24.210	*Will monitor compliance with 13.24.210	Effluent Sampling Station
Silver	*Will monitor compliance with 13.24.210	*Will monitor compliance with 13.24.210	Effluent Sampling Station

***13.24.210 Specific pollutant limitations**
No industry shall discharge wastewater containing pollutants which in combination with other discharges would cause the loadings at the introduction into the treatment plant to exceed the limits in 13.24.210.
**Chlorides mass limit will be determined after startup of the City's Reverse Osmosis system. Compliance will be enforced when limits are applied.

Sulfates Effluent Limitations

Parameter	30-Day Average (mg/L)	Daily Maximum (lb/day)	Location
Sulfates	Monitor Only	Monitor Only	Effluent Sampling Station

Toxicity Characteristics Leaching Procedure (TCLP)

Parameter	EPA Hazardous Waste No.	CAS No.	Regulatory Limit (mg/L)
Arsenic	D004	7440-38-2	5.0
Barium	D005	7440-38-3	100.0
Benzene	D018	71-43-2	0.5
Cadmium	D004	7440-43-9	1.0

Carbon Tetrachloride	D019	56-23-5	0.5
Chlordane	D020	57-74-9	0.03
Chlorobenzene	D021	108-90-7	100.0
Chloroform	D022	67-66-3	6.0
Chromium	D007	7440-47-3	5.0
o-Cresol	D023	95-48-7	200.0
m-Cresol	D024	108-39-4	200.0
p-Cresol	D025	106-44-5	200.0
Cresol	D026	-	200.0
2,4-D Acid	D016	94-75-7	10.0
1,4-Dichlorobenzene	D027	106-46-7	7.5
1,2-Dichloroethane	D028	107-06-2	0.5
1,1-Dichloroethylene	D029	75-35-4	0.7
2,4-Dinitrotoluene	D030	121-14-2	0.1
Endrin	D012	72-20-8	0.02
Heptachlor (and its epoxide)	D031	76-44-8	0.008
Hexachlorobenzene	D032	118-74-1	0.13
Hexachlorobutadiene	D033	87-68-3	0.5
Hexachloroethane	D034	67-72-1	3.0
Lead	D008	7439-92-1	5.0
Lindane	D013	58-89-9	0.4
Mercury	D009	7439-97-6	0.2
Methoxchlor	D014	72-43-5	10.0
Methyl Ethyl Ketone	D035	78-93-3	200.0
Nitrobenzene	D036	98-95-3	2.0
Pentachlorophenol	D037	87-86-5	100.0
Pyridine	D038	110-86-1	5.0
Selenium	D010	7782-49-2	1.0
Silver	D011	7440-22-4	5.0
Tetrachloroethylene	D039	127-18-4	0.7
Toxaphene	D015	8001-35-2	0.5
Trichloroethylene	D040	79-01-6	0.5
2,4,5-Trichlorophenol	D041	95-95-4	400.0
2,4,6-Trichlorophenol	D042	88-06-2	2.0
2,4,5-TP (Silvex)	D017	93-72-1	1.0
Vinyl Chloride	D043	75-01-4	0.2

6. MONITORING REQUIREMENTS

The monitoring requirements under this permit are summarized as follows:

Conventional Pollutant Monitoring

Parameter	Monitoring Frequency	Sample Type	Monitoring Location
Flow*	Weekly - derived from Weekly Pump Run Time Data, multiplied by average pumping rate, divided across number of days of week, or time since last pump reading	Calculated (as derived by dividing Weekly Pump Run Time Data, multiplied by average pumping rate, divided across number of days of week, or time since last pump reading)	Effluent Sampling Station
BOD	One (1) time per month	24-Hour Composite	Effluent Sampling Station
TSS	One (1) time per month	24-Hour Composite	Effluent Sampling Station
Ammonia Nitrogen (NH_3)	One (1) time per month	24-Hour Composite	Effluent Sampling Station
Fats, Oils, and Greases (FOG)	One (1) time per month	Grab	Effluent Sampling Station
pH	One (1) time per month	Grab	Effluent Sampling Station

* Permittee shall report annual pump rate test information to City for use in this calculation.

Local Limits Effluent Monitoring

Parameter	Monitoring Frequency	Sample Type	Monitoring Location
Mercury	One (1) time per month	24-Hour Composite	Effluent Sampling Station
Zinc	One (1) time per month	24-Hour Composite	Effluent Sampling Station
Chlorides*	One (1) time per month	24-Hour Composite	Effluent Sampling Station
Arsenic	Two (2) times per year	24-Hour Composite	Effluent Sampling Station
Cadmium	Two (2) times per year	24-Hour Composite	Effluent Sampling Station
Lead	Two (2) times per year	24-Hour Composite	Effluent Sampling Station
Molybdenum	Two (2) times per year	24-Hour Composite	Effluent Sampling Station

Selenium	Two (2) times per year	24-Hour Composite	Effluent Sampling Station
Silver	Two (2) times per year	24-Hour Composite	Effluent Sampling Station

*Chlorides mass limit will be determined after startup of the City's Reverse Osmosis system. Compliance will be enforced when limits are applied.

Sulfates Effluent Monitoring

Parameter	Monitoring Frequency	Sample Type	Location
Sulfates	One (1) time per month	24-Hour Composite	Effluent Sampling Station

Toxicity Characteristics Leaching Procedure (TCLP)

Parameter	Monitoring Frequency	Sample Type	Monitoring Location
Arsenic	One (1) time per year	24-Hour Composite	Effluent Sampling Station
Barium	One (1) time per year	24-Hour Composite	Effluent Sampling Station
Benzene	One (1) time per year	Grab	Effluent Sampling Station
Cadmium	One (1) time per year	24-Hour Composite	Effluent Sampling Station
Carbon Tetrachloride	One (1) time per year	Grab	Effluent Sampling Station
Chlordane	One (1) time per year	Grab	Effluent Sampling Station
Chlorobenzene	One (1) time per year	Grab	Effluent Sampling Station
Chloroform	One (1) time per year	Grab	Effluent Sampling Station
Chromium	One (1) time per year	24-Hour Composite	Effluent Sampling Station
o-Creosol	One (1) time per year	Grab	Effluent Sampling Station
m-Creosol	One (1) time per year	Grab	Effluent Sampling Station
p-Creosol	One (1) time per year	Grab	Effluent Sampling Station
Creosol	One (1) time per year	Grab	Effluent Sampling Station
2,4-D Acid	One (1) time per year	Grab	Effluent Sampling Station
1,4-Dichlorobenzene	One (1) time per year	Grab	Effluent Sampling Station
1,2-Dichloroethane	One (1) time per year	Grab	Effluent Sampling Station
1,1-Dichloroethylene	One (1) time per year	Grab	Effluent Sampling Station
2,4-Dinitrotoluene	One (1) time per year	Grab	Effluent Sampling Station
Endrin	One (1) time per year	Grab	Effluent Sampling Station
Heptachlor (and its epoxide)	One (1) time per year	Grab	Effluent Sampling Station
Hexachlorobenzene	One (1) time per year	Grab	Effluent Sampling Station
Hexachlorobutadiene	One (1) time per year	Grab	Effluent Sampling Station

Hexachloroethane	One (1) time per year	Grab	Effluent Sampling Station
Lead	One (1) time per year	24-Hour Composite	Effluent Sampling Station
Lindane	One (1) time per year	Grab	Effluent Sampling Station
Mercury	One (1) time per year	24-Hour Composite	Effluent Sampling Station
Methoxchlor	One (1) time per year	Grab	Effluent Sampling Station
Methyl Ethyl Ketone	One (1) time per year	Grab	Effluent Sampling Station
Nitrobenzene	One (1) time per year	Grab	Effluent Sampling Station
Pentachlorophenol	One (1) time per year	Grab	Effluent Sampling Station
Pyridine	One (1) time per year	Grab	Effluent Sampling Station
Selenium	One (1) time per year	24-Hour Composite	Effluent Sampling Station
Silver	One (1) time per year	24-Hour Composite	Effluent Sampling Station
Tetrachloroethylene	One (1) time per year	Grab	Effluent Sampling Station
Toxaphene	One (1) time per year	Grab	Effluent Sampling Station
Trichloroethylene	One (1) time per year	Grab	Effluent Sampling Station
2,4,5-Trichlorophenol	One (1) time per year	Grab	Effluent Sampling Station
2,4,6-Trichlorophenol	One (1) time per year	Grab	Effluent Sampling Station
2,4,5-TP (Silvex)	One (1) time per year	Grab	Effluent Sampling Station
Vinyl Chloride	One (1) time per year	Grab	Effluent Sampling Station

1. RESPONSIBILITY FOR SAMPLING, MONITORING AND ANALYSIS

Monitoring samples shall be collected downstream of any pretreatment facilities, prior to dilution with any non-regulated wastewater stream and prior to discharge to the City's sanitary sewer system.

Sampling, monitoring, and analysis under this permit will be as follows (check all thatapply):

☐ **Sampling and monitoring are not required because this is a Non-Significant Categorical user.**

☐ **Sampling, monitoring, and analysis shall be performed by the Permittee.**

☒ **Sampling, monitoring, and analysis shall be performed by the City in lieu of Permittee as provided in 40 CFR 403.12(g)(1).** In the event the City is unable to perform the sampling, the Permittee shall be responsible for sampling at the frequencies specified in **40 CFR 403.12(h).**

☒ **Flow monitoring equipment shall be provided and maintained by** the Permittee **at the following location (s):** Effluent Sampling Station.

☒ **Composite sampler(s) shall be provided and maintained by** the Permittee **at the following location(s):** Effluent Sampling Station.

If routine sampling, monitoring, or analysis is performed by the City in lieu of Permittee, the Permittee may be required to reimburse the City for expenses incurred. The Permittee may also be required to reimburse the City for the costs of providing and maintaining flow monitoring equipment or composite samplers. All samples and measurements shall be taken at the monitoring locations specified in this permit (unless otherwise noted) and must be representative of the conditions being monitored. The Permittee shall not change, alter, or remove any monitoring or sampling equipment without prior approval from the City. Sampling and monitoring equipment provided by the Permittee shall be maintained by the Permittee in good working order at Permittee's own expense. The Permittee shall immediately notify the City of any problems and promptly repair or replace any sampling or monitoring equipment that is not functioning properly. Spare parts shall be kept available at the Permittee's facility as necessary to make routine repairs. Flow monitoring equipment shall be calibrated at least once a year to ensure accuracy. The calibration shall be performed by a qualified third party acceptable to the City. The Permittee will be responsible for securing the third party to perform the calibration. The calibration shall ensure that accuracy is consistent with the accepted capability for that type of flow monitoring device and does not deviate by more than ten percent from true discharge rates throughout the range of expected discharge volumes. Calibration reports shall be submitted to the Pretreatment Office at least annually and more often if monitoring problems indicate the need for more frequent calibration.

Permittee shall be equipped with a sampling station at a point of effluent discharge. The sampling station shall have a sink, running hot water, locking sampler, flow meter, drain and light source. The station maybe in-house or at an exterior location. An exterior location must be enclosed, heated and adequately accessible. All samples shall be kept refrigerated at 4 degrees Celsius. If Permittee is out of compliance with this ordinance, the Control Authority may request renovations or relocation of said sampling stations.

8. TEST METHODS. *40 CFR 403.12(g)(5)*

Samples must be analyzed using approved methods specified in 40 CFR Part 136 and amendments thereto. Recognized laboratory manuals such as "Standard Methods for the Examination of Water and Wastewater" (current edition) may be used as a reference.

9. USE OF CERTIFIED LABORATORIES. *IAC 567-63.1(4)*

All testing must be done by laboratories certified by the State of Iowa under one or more of Iowa's environmental laboratory certification programs in accordance with IAC 567 Chapter 83. Routine on-site monitoring for pH, temperature, dissolved oxygen, total residual chlorine, and settleable solids, are excluded from this requirement (reference IAC 567-63.1(4)).

10. RECORDKEEPING. *40 CFR 403.12(o)* and *IAC 567-63.2*

The City shall maintain records of all monitoring activities in accordance with 40 CFR 403.12(o) and IAC 567-63.2. The records shall include: (1) Date, time, and place of sampling; (2) Name of person who collected the samples or took the measurements; (3) Method of sampling used; (4) Dates when samples were analyzed; (5) Name of person who performed the analysis; (6) Analytical techniques used; (7) Results of the analysis; and (8) Name and identification number of Iowa-

certified testing laboratory that did the analysis. The City shall keep these records on-site at its facility and retain them for a minimum of three years. These records shall be available for the Permittee to review during normal working hours but do not need to be submitted to the Permittee unless specifically requested. Permittee shall keep Operation and Maintenance Records of their wastewater treatment facility, and shall furnish them at City's request, in order to establish Permittee's adequacy in operating and maintaining their facility to meet the discharge requirements specified herein.

11. PERIODIC MONITORING REPORTS. *40 CFR 403.12(e) and (h)*

The Permittee will be responsible for periodic monitoring reports as follows (check one):

☒ **Periodic monitoring reports are not required.** Permittee is exempt under 40 CFR 403.12(g)(1) and is not required to submit periodic monitoring reports to the City because either: (1) the Facility is a Non-Significant Industrial User; or (2) Sampling and analysis is performed by the City in lieu of the Permittee and the information for the reports is collected by the City itself

☐ **Periodic monitoring reports are required.** Permittee is required to submit periodic monitoring reports to the City as specified in 40 CFR 403.12(e) for Categorical Industrial Users, or 40 CFR 403.12(h), for Non-Categorical Significant Industrial Users. These code sections require the reports to be submitted once every six months on June 30 and December 31. The reports may be required more frequently if deemed necessary by the City or may be reduced to not less than once a year for a "Middle Tier" Categorical Industrial User as allowed under CFR 403.12(e)(3). For this permit, it has been determined that the monitoring reports will be required at intervals of one time per month. The reports shall be due no later than 15 days following the end of each monthly monitoring period.

Monitoring reports may be submitted by any means acceptable to the City. The reports shall include a summary of the monitoring data collected during each month. The data shall be arranged in tabular form with column headings similar to the forms used by the Iowa Department of Natural Resources. Days should be listed in the left-hand column with the first day of the month at the top and last day at the bottom. Flow data should be reported in the next column. The rest of the columns are to be used for reporting test data for other parameters such as CBOD and TSS. The data in each column shall be tabulated at the bottom of the page to show the average, maximum, and minimum values for each parameter. If the Permittee monitors any pollutants more frequently than required by this permit, the data from such monitoring shall be included in the monitoring reports per 40 CFR 403.12(g)(6) and shall be used in determining the average, maximum, and minimum values.

All monitoring reports must be signed and dated and include the following certification statement found in 40 CFR 403.6(a)(2)(ii):

"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."

The above certification must be signed by a responsible corporate officer or manager at the facility in accordance with 40 CFR 403.12(l) unless the Permittee provides the City with written authorization for other individuals to sign on behalf of the corporate officer or manager as specified in 40 CFR 403.12(l)(3).

12. SAMPLING AND SURVEILLANCE BY CITY. *40 CFR 403.8(f)(2)(v)*

The City will randomly sample and analyze effluent from the Permittee's facility and conduct surveillance inspections to identify noncompliance with pretreatment standards as specified in 40 CFR 403.8(F)(2)(f). The sampling and surveillance will be done at least one time per year but may be done more frequently if deemed necessary by the City or may be reduced to once every two years for a "Middle Tier" Categorical Industrial User as allowed under 40 CFR 403.8(f)(2)(v)(c). The City may choose not perform sampling and surveillance of this facility if it is classified as a Non Significant Categorical Industrial User, however, the City must conduct an evaluation one time per year to determine if the facility continues to meet the criteria for this classification as specified in 40 CFR 403.8(f)(2)(v)(B). The City reserves the right to do random sampling and surveillance at any time it deems necessary. The Permittee may be required to reimburse the City for expenses incurred in performing the random sampling, analysis, and surveillance inspections.

13. ACCESS BY CITY.

The City or its duly authorized representative(s) shall be allowed to enter the Permittee's premises at reasonable times as necessary to collect effluent samples or conduct surveillance inspections. The City shall be allowed access to all sampling and monitoring locations, areas where wastewater treatment is performed, and any areas where pollutants could enter the sewer. The Permittee is responsible for maintaining access to all sampling and monitoring locations and shall keep the sampling and monitoring locations cleared of snow and ice, as necessary. Permittee may also be required to erect shelter buildings over sampling manholes, flow monitoring structures, and other outdoor monitoring locations where deemed necessary by the City.

14. SLUG CONTROL PLAN. *40 CFR 403.8(f)(2)(vi) and City Code 13.24.240*

A slug discharge is an accidental spill, release, bypass, or other non-routine discharge that has a reasonable potential to cause interference or pass through at the City's wastewater treatment plant causing or contributing to noncompliance resulting in violate of any regulation or National Pollution Discharge Elimination System (NPDES) permit limit by the City. A slug control plan is a management strategy to prevent slug discharges and mitigate adverse impacts. Federal code Section 40 CFR 403.8(f)(2)(vi) requires the City to evaluate each industrial user at least one time to determine if the facility is required to have a slug control plan or implement other measures to prevent slug discharges. This evaluation has resulted in the following determination under this permit (check one):

☐ **This facility does not need a slug control plan.** The facility does not have a reasonable

potential to cause slug discharges or has implemented appropriate measures to prevent slug discharges.

☒ **This facility already has a satisfactory slug control plan on file with the City.**

☐ **This facility must submit a slug control plan.** The Permittee is required to submit a slug control plan to the City within 120 days after this permit is issued.

Slug control plans are required to contain the following elements: (1) Description of discharge practices including non-routine batch discharges; (2) Description of storage facilities for all chemicals; (3) Procedures for immediately notifying the City of any slug discharge with follow-up written notification within five days; and (4) Procedures for preventing adverse impacts from spills including inspection and maintenance of chemical storage areas, material handling areas, loading and unloading operations, control of site run-off, worker training, spill containment structures and/or measures and equipment for emergency response. If the facility has other plans or reports that contain the information needed for a slug control plan these other plans or reports may be used as attachments to the slug control plan. Examples of other plans or reports that may be used include "Spill Prevention and Countermeasure (SPCC) Plans" and "Hazardous Chemical Inventory Reports".

The Permittee is required to notify the City immediately of any changes at its facility that could affect the potential for a slug discharge so the City may re-evaluate slug control measures if necessary.

15. NOTICE OF POTENTIAL PROBLEMS, INCLUDING SLUG LOADING. *40 CFR 403.12(f)*

Permit holder must immediately notify the City of any discharges that could cause problems with the City's wastewater treatment facilities including spills, slug loadings, and discharges that would violate a prohibited discharge standard under 40 CFR 403.5. The Permittee shall additionally provide follow-up written notification of such problems to the City within five (5) days as required in 40 CFR 403.8(f)(2)(vi)(c).

16. NOTICE OF VIOLATION AND REPEAT SAMPLING. *40 CFR 403.12(g) (2)*

If sampling performed by the Permittee indicates a violation, the Permittee shall notify the City within 24 hours of becoming aware of the violation as provided in 40 CFR 403.12(g)(2). The Permittee shall also repeat the sampling and analysis for the parameter that had the violation and submit the results of the repeat analysis to the City within 30 days after becoming aware of the violation. If the sampling was performed by the City in lieu of the Permittee, the repeat sampling and analysis will be done by the City unless it notifies the Permittee of the violation and requires the Permittee to perform the repeat analysis. Repeat sampling will not be required if the parameter that had the violation is regularly sampled and tested at least once a month.

17. NOTIFICATION OF CHANGED DISCHARGE. *40 CFR 403.12(j) and City Code 13.24.230*

The Permittee shall promptly notify the City in advance of any substantial change in the volume or character of any pollutants in its effluent discharge. This includes pollutants subject to the hazardous waste notification requirements in 40 CFR 403.12(p) as described below.

18. NOTIFICATION OF HAZARDOUS WASTE DISCHARGE. *40 CFR 403.12(p) City Code 13.24.235*

If the Permittee discharges more than fifteen kilograms per month of any substance to the City's treatment plant that would be considered hazardous waste under 40 CFR 261, the Permittee must submit a one-time written notification to the City of Fort Dodge, the EPA Regional Waste Management Division, and the Iowa Department of Natural Resources. Written notification is also required if the Permittee discharges any amount of any substance that would be considered "acute" hazardous waste as specified in 40 CFR 261.30(d) or 261.33(e). The notification must include the name of the hazardous waste as set forth in 40 CFR 261, the EPA hazardous waste number, and type of discharge (continuous, batch, or other). If the amount of hazardous waste exceeds 100 kilograms per month, the notification shall also include: (1) an identification of the hazardous constituents in the wastes; (2) an estimate of the mass and concentration of hazardous constituents discharged during that calendar month; and (3) an estimate of the mass of constituents expected to be discharged during the following twelve months. All notifications must be accompanied by a certification that the Permittee has a waste reduction program in place to reduce the volume and toxicity of hazardous wastes generated to a degree it has determined to be economically practical. The notification must be submitted within 180 days after the discharge of hazardous waste begins and is also required within 90 days after the effective date of any rule changes that reclassify existing wastes as hazardous wastes. The notification needs to be submitted only once for each hazardous waste that is discharged, however, if there are any changes in the volume or character of the waste a notification of "changed discharge" must be submitted as specified in 40 CFR 403.12(j). Pollutants already reported under the self-monitoring requirements of 40 CFR 403.12(b), (d), and (e) are exempt from the notification requirements.

19. UPSET NOTIFICATION. *40 CFR 403.16*

An Upset is defined as an exceptional incident in which there is unintentional and temporary noncompliance with pretreatment standards due to factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed or inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation. If the Permittee experiences an upset that results in temporary noncompliance, the Permittee shall inform the City within 24 hours of becoming aware of the upset and provide a follow-up written report to the City within five (5) days. The report shall contain: (1) a description of the upset and its cause; (2) the duration of noncompliance including exact dates and times and/or anticipated time the noncompliance is expected to continue if the problem has not yet been corrected; (3) steps taken or planned to reduce, eliminate, and prevent any further upsets or noncompliance. An upset may be used as an affirmative defense in enforcement proceedings if the Permittee can establish that the noncompliance was caused by an upset and can also demonstrate that the pretreatment facility was being operated in a prudent and workman-like manner at the time the upset occurred. The Permittee shall have the burden of proof in establishing that an upset occurred.

20. BYPASS NOTIFICATION. *40 CFR 403.17*

A bypass is an intentional diversion of a waste stream from any portion of a treatment facility. All bypasses are prohibited except for emergency bypasses and planned bypasses. Emergency bypasses will only be permitted if they are essential to prevent loss of life, personal injury, or severe property damage and there is no feasible alternative to the bypass. Planned bypasses will only be permitted if they are essential for maintenance purposes and do not cause any violations of pretreatment standards. If the Permittee knows in advance of the need for a bypass, it shall submit written notice to the City at least ten (10) days prior to the date of the bypass if possible. If a bypass results in noncompliance (even a planned bypass for maintenance purposes) or an unanticipated bypass occurs, the Permittee must inform the City within 24 hours after becoming aware of the noncompliance and must submit a follow-up written report to the City within five days. The report shall contain: (1) a description of the bypass and its cause; (2) the duration of bypass including exact dates and times and/or anticipated time the bypass is expected to continue if the problem has not yet been corrected; (3) steps taken or planned to reduce, eliminate, and prevent any further bypasses.

21. SPECIAL REPORTS FOR CATEGORICAL USERS. *40 CFR 403.12(b), (c), and (d)*

Categorical Industrial Users are required to submit the following reports:

Baseline Monitoring Report (BMR). 40 CRF 403.12(b). New facilities that will be subject to a categorical standard must submit a baseline monitoring report to the City at least 90 days prior to commencement of discharge. Existing facilities that become subject to a new categorical standard after the facility was built must submit a baseline report to the City within 180 days after the effective date of the new standard. Baseline reports shall contain all the information listed in 40 CFR 403.12(b) (1) through (5).

For existing facilities, the baseline reports shall additionally contain a certification by a qualified professional as required in 40 CFR 403.12(b) (60). The certification shall indicate whether applicable pretreatment standards are being met, and, if not, specify whether additional pretreatment facilities are required to meet the standards. If the facility is unable to meet the pretreatment standards, it must submit a compliance schedule to the City as required in 40 CFR 403.12(b) (7). The compliance schedule shall contain dates for major events leading to the construction of a new wastewater pretreatment facility or upgrade of an existing facility as necessary to achieve compliance. Examples of major events include hiring of an engineer, begin design, complete design, start construction, complete construction, performance testing, and final compliance.

Compliance Schedule Progress Reports. 40 CFR 403.12(c). If an existing facility is subject to a compliance schedule under 40 CFR 403.12(b)(7), it must submit progress reports to the City no later than 14 days after each date in the schedule and no more than 9 months apart. Progress reports shall indicate the status of the project and whether or not it is on schedule. If the project is falling behind, the report shall indicate the reason for the delay, steps being taken to return to schedule, and a statement of when the project is expected to be back on schedule. The City will review these reports to track the progress of the work.

90-Day Compliance Report. 40 CFR 403.12(d). New facilities that are subject to a categorical standard must submit a compliance report to the City within 90 days after commencement of discharge. Existing facilities that became subject to a new categorical standard must submit a

compliance report to the City within 90 days after the final compliance date specified in a categorical standard or within 90 days after the compliance date specified by the City, whichever is earlier. Compliance reports shall include flow measurements and pollutant measurements along with their applicable pretreatment limits and certification by a qualified professional indicating whether the pretreatment standards are being met. If the standards are not being met, the report must specify how compliance will be achieved.

The Baseline Monitoring Report and 90-Day Compliance Report must include the certification statement in 40 CFR 403.6(a) (2) (ii) and be signed in accordance with the signatory requirements in 40 CFR 403.12(l).

22. CERTIFICATION BY NON-SIGNIFICANT CATEGORICAL USERS. *40 CFR 403.12(q)*

Non-Significant Categorical Industrial Users must submit an annual certification to the City as follows:

Based on my inquiry of the person or persons directly responsible for managing compliance with the categorical Pretreatment Standards under 40 CFR_____. I certify that, to the best of my knowledge and belief that during the period from_____, to_____[months, days, year]:

(a) The facility described as_____(facility name) met the definition of a Non-Significant Categorical Industrial User as described in §403.3(v)(2);

(b) The facility complied with all applicable Pretreatment Standards and requirements during this reporting period; and

(c) The facility did not discharge more than 100 gallons of total categorical wastewater on any given day during this reporting period. This compliance certification is based upon the following information:

The certification statement for non-significant categorical users must be signed in accordance with the signatory requirements in 40 CFR 403.12(l).

23. PROHIBITED DISCHARGES. *40 CFR 403.5 and City Code 13.24.180*

The Permittee shall not discharge any pollutants prohibited under 40 CFR 403.5 or City Code 13.24.180. Prohibited discharges include, but are not limited to, the following:

(a) Pollutants which create a fire or explosion hazard including gasoline, benzene, solvents, and other substances with a closed cup flashpoint of less than 60 degrees Centigrade (140 degrees Fahrenheit).

(b) Corrosive substances or wastewater having a pH above 9.5 or less than 5.5.

(c) Solid or viscous pollutants including grease, sludge, garbage, fax, wax, tar, rags, wood, etc., which may obstruct flow or interfere with the treatment works.

(d) Any pollutant in an amount that will cause interference at the City's treatment works, including oxygen demanding pollutants such as BOD.

(e) Heat in amounts which will inhibit biological activity at the treatment works or cause the temperature at the treatment works to exceed 40 degrees Centigrade (104 degrees Fahrenheit), but in no case wastewater having a temperature higher than 65 degrees Centigrade (150 degrees Fahrenheit).

(f) Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through the treatment works.

(g) Toxic liquids, solids, gases, vapors, or fumes that may cause health or safety problems.

(h) Any wastewater containing medical wastes or radioactive wastes.

(i) Any wastewater with an objectionable color not removed in the treatment process including dyes.

(j) Any trucked or hauled pollutants, except at discharge points designated by the City.

(k) Any substance that may interfere with the City's treatment works or cause violation of its NPDES permit.

24. SIGNIFICANT NONCOMPLIANCE. *40 CFR 403.8(f)(2)(viii)*

The Permittee will be considered to be in "significant non-compliance" for any of the following:

(a) Chronic Permit Violations. These are violations in which 66 percent or more of the measurements for the same parameter during a 6-month period exceeded the discharge limit for that parameter.

(b) Technical Review Criteria (TRC) Violations. These are violations in which 33 percent or more of the measurements for the same parameter during a 6-month period were equal to or greater than the discharge limit multiplied by the applicable TRC factor (TRC = 1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH).

(c) Any other serious violation of a pretreatment standard or requirement if the City determines that the violation caused significant interference or noncompliance at the City's wastewater treatment plant.

(d) Any discharge of a pollutant that has caused imminent risk to human health or welfare, or endangered the environment, or resulted in the City exercising its emergency authority to halt or prevent such a discharge under 40 CFR 403.8(f)(l)(vi)(B).

(e) Failure to meet a compliance schedule deadline within 90 days after the completion date in the schedule.

(f) Failure to submit a required report within 45 days after the due date.

(g) Failure to accurately report noncompliance or violations.

(h) Any other violation or group of violations that adversely affect the operation of the City's treatment plant.

25. ANNUAL PUBLICATION. *40 CFR 403.8(f)(2)(viii)*

The public notification requirement in 40 CFR 403.8(f) (2) (viii) requires the City to annually publish a list of Industrial Users who were in significant noncompliance at any time during the previous twelve (12) months. The list must be published in a newspaper having the largest circulation in the area. The Permittee is hereby advised that significant noncompliance with this permit may result in publication of its name in a newspaper.

26. DUTY TO HALT OR PREVENT DISCHARGE. *40 CFR 403.8(f)(1)(vi)(B)*

The Permittee shall immediately halt and/or prevent discharge of pollutants to the City upon informal notice by the City that the discharge presents an imminent risk to the health or welfare of persons, endangers the environment, or threatens to interfere with the operation of the City's wastewater treatment plant.

27. DILUTION.

The Permittee shall not dilute its effluent with potable water or any other water in an attempt to meet the effluent limits in this permit. Dilution will not be allowed as a substitute for proper treatment.

28. ENFORCEMENT PROCEDURE. *40 CFR 403.8(f)(l)(vi)(A) and City Code13.12, 13.24.350*

(a) Surcharges: The Program Administrator shall levy surcharges for any discharge(s) that exceed BOD, TSS, Ammonia, Nitrogen, or FOG per City Code 13.12.

(b) Surcharge Rates: The rates for BOD, TSS, Ammonia Nitrogen or FOG shall be according to those rates found per City Code 13.12.

(c) Violations and Enforcement: Noncompliance with this permit shall constitute a violation of City Ordinance No. 1863 and may result in assessment of penalties or fines in amounts of up to $1,000 per day per violation as provided in City Code Section 13.24.350 and 40 CFR 403.8(f)(l)(vi)(A). Continued noncompliance may result in enforcement proceedings, administrative orders, compliance schedules, and/or renovation of this permit as provided in City Code Section 13.24.315.

The attached chart (provided at the end of this permit) further outlines types of violations and specifies POTW actions (initial and escalated), timeframes, and the officials

responsible for completing the actions. This chart shall be considered a part of this Discharge Permit.

29. RECOVERY OF COSTS.

In addition to basic charges for normal sewer service, the Permittee shall be responsible for the following additional costs:

(a) Costs for the City to provide or maintain flow meters or composite samplers on behalf of the Permittee.

(b) Costs for the City to perform routine sampling, monitoring, or analysis on behalf of the Permittee.

(c) Costs for the City to perform random sampling, analysis, and surveillance per 40 CFR 403.8(f) (2) (v).

(d) Costs of any loss, damage, or expense incurred by the City because of Permittee's discharge.

(e) Costs of any cleaning or repair work required because of Permittee's discharge.

(f) Assessment of penalties or fines for violations of this permit or City Ordinance.

(g) Costs incurred to publish permittee's name in a newspaper as required in 40 CFR 403.8(f)(2)(viii) if the Permittee was in significant noncompliance at any time during the previous 12 months.

(h) Surcharges for CBOD5 or Total Suspended Solids (TSS) in excess of 250 mg/L per City Code 13.12.

(i) Surcharges for Oil/Grease in excess of 100 mg/L per City Code 13.12.

(j) Surcharges for Ammonia Nitrogen in excess of 20 mg/L per City Code 13.12.

30. CONTINUATION OF EXPIRED PERMITS.

An expired permit will continue to be effective and enforceable until a new permit is issued if the Permittee filed for renewal at least 180 days prior to the permit's expiration date and the delay in reissuing a new permit was not caused by any fault of the Permittee.

ANTICIPATED ENFORCEMENT ACTIONS/PROCEDURES

Unpermitted Discharge

Type of Violation	Industrial Pretreatment Program Action	Timeframe	Responsible Official	Expected Action from User	Escalated Action if Needed
Unpermitted Discharge (Unaware of Requirement)	Notice of Non-Compliance	Within 30 Days of Discovery of Discharge	Pretreatment Coordinator	File Permit Application	Notice of Violation; Suspend Service Until Permit Is Issued
Unpermitted Discharge (Aware of Requirement)	Notice of Violation with Penalty Assessed	Within 30 Days of Discovery of Discharge	Director	File Permit Application	Suspend Service Until Permit Is Issued
Unpermitted Discharge (Resulting in Violation at WPCF)	Order to Cease Process Causing Violation; Notice of Violation with penalty per day per violation per established tiered penalty structure	Order to Cease Immediately; Notice of Violation within 15 days	Director	File Permit Application; Report Steps Taken to Prevent Violation	Suspend Service Until Permit Issued
Unpermitted Discharge (Resulting in Endangerment)	Suspend Service; Notice of Violation with penalty per day per violation per established tiered penalty structure	Suspend Service Immediately; Notice of Violation within 15 days	Director	File Permit Application; Report Steps Taken to Prevent Future Endangerment	Not Applicable

Permit Limit Violations

Type of Violation	Industrial Pretreatment Program Action	Timeframe	Responsible Official	Expected Action from User	Escalated Action if Needed
Permit Limits Violation Single Event (Minor)	Notice of Non-Compliance or Notice of Violation	Within 30 days of receiving data	Pretreatment Coordinator or Director	Conduct Additional Monitoring and Return to Compliance	Notice of Violation with Penalty
Permit Limits Violation	Notice of Violation with penalty per day per violation per established tiered penalty structure	Within 30 days of Receiving Data	Director	Conduct Additional Monitoring and Return to Compliance	Second Notice of Violation with Increased Penalty
Permit Limits Violation Significant Non-Compliance	Notice of Violation with penalty per day per violation per established tiered penalty structure	Within 30 days of Receiving Data	Director	Report cause of Non-Compliance and Steps Taken to Prevent Violation	Enforceable Schedule; Suspend Service if Inadequate Action is Taken
Permit Limits Violation (Resulting in Violation at WPCF)	Order to Cease Process Causing Violation Notice of Violation with penalty per day per violation per established tiered penalty structure	Order to Cease Immediately Notice of Violation Within 15 days of Discovering Violation	Director	Report cause of Non-Compliance and Steps Taken to Prevent Violation	Suspend Service Until Resolved; Enforceable Schedule

Other Violations

Type of Violation	Industrial Pretreatment Program Action	Timeframe	Responsible Official	Expected Action from User	Escalated Action if Needed
Permit Limits Violation results in Endangerment	Suspend Service Notice of Violation penalty per day per violation per established tiered penalty structure	Suspend Service Immediately Notice of Violation within 15 days of Discovering Violation	Director	File for Reissuance of Permit	Not Applicable
Self-Monitoring Violations	Notice of Non-Compliance or Notice of Violation	Within 30 Days of Discovery	Pretreatment Coordinator or Director	Conduct Missed Sampling	Second Notice of Violation with minimum Penalty equal to Cost of Missed Testing
Reporting Violations Late Report	Notice of Non-Compliance	Within 30 days of the Report Due Date	Pretreatment Coordinator	Submit Report	Notice of Violation Penalty Assessed Possible SNC if over 30 days
Reporting Violations Incomplete or Inaccurate Reports	Notice of Non-Compliance	Within 30 days of Report Submission	Pretreatment Coordinator	Submit Revised Report	Notice of Violation Penalty Assessed
Reporting Violations Intentional Falsification	Referred to District Attorney	As soon as suspected	Director	Not Applicable	Not Applicable

Other Violations (Continued)

Type of Violation	Industrial Pretreatment Program Action	Timeframe	Responsible Official	Expected Action from User	Escalated Action if Needed
Violation of Permit Conditions	Notice of Violation with penalty per day per violation per established tiered penalty structure	Within 30 Days of Discovery	Director	Varies	Second Notice of Violation with Increased Penalty
Violation of Permit Conditions (Resulting in Violation at WPCF or Endangerment of WPCF Personnel)	Suspend Service Notice of Violation with penalty per day per violation per established tiered penalty structure	Suspend Service Immediately Notice of Violation Within 715 days	Director	Steps taken to Avoid Reoccurrence	Not Applicable

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 NCIRSWA 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

North Central Iowa Regional Solid Waste Agency
2151 Gypsum Hollow Road, PO Box 578
Fort Dodge, IA 50501
515-955-2781

Official Responsible for Operation of Facility

Mark Campbell, Chief Operating Officer
North Central Iowa Regional Solid Waste Agency
2151 Gypsum Hollow Road, PO Box 578
Fort Dodge, Iowa 50501
(515)955-2781

Service Area of the Facility

The North Central Iowa Regional Solid Waste Agency (NCIRSWA) is a 28E organization with the following service area:

> All cities and unincorporated areas in Webster County; all cities and unincorporated areas in Hamilton County; all cities and unincorporated areas in Humboldt County, excluding the city of Bode; the City of Eagle Grove in Wright County; and the Cities of Rockwell City, Knierim, Pomeroy, and Manson and the North Central Correctional Facility in Calhoun County.

Days and Hours of Operation

Monday through Friday from 7:30 AM – 4:00 PM
Saturday from 7:30 AM – 12 Noon

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 conducted a minimum of 1 time each week. Records of random load checks are maintained in the scale house.

3. Landfill staff will receive training for waste screening as applicable.

4. Any prohibited waste observed by any 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 NCIRSWA Landfill. Scrap metal, tires, appliances, and concrete/rubble are accepted for recycling at the NCIRSWA Landfill. Other materials are accepted for recycling at the NCIRSWA Recycling Center and the NCIRSWA Household Hazardous Materials Regional Collection Center, both of which are located on Gypsum Hollow Road approximately 0.6 miles north of the landfill entrance. Brush and trees are accepted and stockpiled and burned in an area that has been removed from the landfill permit.

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 NCIRSWA Landfill. Note that tree and brush burning is allowed within a non-waste area that was removed from the site permitted boundary in 2017. A second burn area was also approved by IDNR but that area has been abandoned and a request is contained in this permit renewal documentation to add the area that comprised the second burn area back into the Permitted Area of the landfill. 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 NCIRSWA Landfill.

113.8(1)e. Animal feeding and grazing

No domestic animal feeding or grazing is allowed at the NCIRSWA Landfill.

567-113.8(2) – Disposal Operations and Activities

113.8(2)a. Survey controls and monuments

1. The property boundary and the permitted boundary of the NCIRSWA Landfill 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 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 #2 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 truck 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 this timeline is not applicable for side slopes "greater than 10 feet above the base liner". This is in accordance with the IDNR memo 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 the waste in the active portion 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 on site borrow areas and soil stockpiles.

   At this time the NCIRSWA Landfill has been approved to use the following as Alternative Daily Cover (ADC): Topcoat, ground gypsum wallboard mixed with soil, a tarp system, and street sweepings. Periodically, petroleum contaminated soil may be received and following remediation as prescribed in 567 IAC-109, will 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 Subtitle D composite lined disposal areas (with the exception of the Subtitle D lined Abutment Area) has been approved; however, little leachate has been recirculated to date.

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.

A slip plane was noted in the closure cap in the SE Lateral Expansion Area in 2017. Since that time, the area has been monitored with minimal additional movement noted. IDNR has approved a methodology for remediation of the slip plane and repair of the cap in this area. A

contractor has been retained to complete the remediation with the work scheduled to be finished during 2025.

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. Access to the site is also restricted using fencing and natural buffers.

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 Submittal.

Information on the waste received and disposed of at the NCIRSWA Landfill 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 conditions 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 NCIRSWA Landfill accepts and recycles scrap metal, tires, appliances, and concrete/rubble. Other materials are accepted for recycling at the NCIRSWA Recycling Center and the NCIRSWA Household Hazardous Materials Regional Collection Center, both of which are located on Gypsum Hollow Road approximately 0.6 miles north of the landfill entrance. 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 working face 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. Portable litter fences near the working face serve to control blowing litter and to keep litter from entering neighboring properties as much as practical. One full-time employee is responsible for the daily handpicking of litter as weather permits. Additional staff will also collect windblown litter on an as-needed basis. 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 conditions for all weather access. A water truck is on-site and used for dust control when needed.

113.8(3)h. Mud

All major internal roads are constructed with gravel, crushed concrete or similar material and maintained in good conditions for all weather access. Trucks leaving the working face travel on gravel access roads for approximately 3/4 mile prior to leaving the site. 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 is ever noted on the pavement at the landfill entrance, the NCIRSWA Landfill 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 leachate collection system piping is cleaned at least once every three years. There is no leachate storage at the NCIRSWA Landfill. The leachate is pumped to the City of Fort Dodge Sanitary Sewer System on an as needed basis and conveyed to the City of Fort Dodge POTW for treatment and disposal. The Industrial User Wastewater Discharge Permit with the City of Fort Dodge POTW is included in Attachment 1 of this Appendix. The current permit expires December 31, 2025, the application for a renewed permit was submitted to US Water on June 17, 2025.

113.8(3)j. Financial assurance

The NCIRSWA 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. Discussion on Financial Assurance requirements is included in Section H of this Submittal.

APPENDIX 2

Emergency Response and Remedial Action Plan

North Central Iowa Regional Solid Waste Agency Sanitary Landfill
2240 Gypsum Hollow Road
Fort Dodge, IA 50501

IDNR Permit #94-SDP-01-75P

August, 2025

Document Purpose:

The plan was prepared by HLW Engineering Group for the North Central Iowa Regional Solid Waste Agency (NCIRSWA) 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 NCIRSWA 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 NCIRSWA 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. Note that this document does not apply to the NCIRSWA Recycling Center or the NCIRSWA Household Hazardous Materials RCC.

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

North Central Iowa Regional Solid Waste Agency

A.2. IDNR permit number(s)

94-SDP-01-75P

A.3. Responsible official and contact information

Mark Campbell, Chief Operating Officer
NCIRSWA
2151 Gypsum Hollow Road, PO Box 578
Fort Dodge, IA 50501
(515)955-2781

The Chief Operating Officer (COO) will have the responsibility for coordinating emergency response procedures. If the COO leaves the premises during normal operating hours other personnel will be given the responsibility to coordinate emergency response activities.

A.4. Certified operators and contact information

Jason Potts (IDNR Cert. #31213)
Levi Porter (IDNR Cert. #31022)
Terry Michehl (IDNR Cert. #31017)
Paul Korf (IDNR Cert. #31144)
Austin Hauge (IDNR Cert. #31209)
NCIRSWA SLF
All operators are located at:
2240 Gypsum Hollow Road
Fort Dodge, IA 50501
And can be contacted at:
(515)955-2781

A.5. Facility description

The North Central Iowa Regional Solid Waste Agency (NCIRSWA) operates a sanitary disposal project in Webster County that is classified as a sanitary landfill. The NCIRSWA Planning Area includes: All cities and unincorporated areas in Webster County; all cities and unincorporated areas in Hamilton County; all cities and unincorporated areas in Humboldt County, excluding the City of Bode; the City of Eagle Grove in Wright County; and the Cities of Rockwell City, Knierim, Pomeroy, and Manson and the North Central Correctional facility in Calhoun County as defined in the comprehensive plan. Recyclable materials accepted at the landfill include appliances, concrete rubble, scrap metal, and tires.

The sanitary landfill is presently comprised of closed landfilling areas, active landfilling areas, and site infrastructure. The original landfilling area is an unlined area that has been closed with a closure cap in accordance with IDNR requirements. The Subtitle D compliant areas consist of the following:

- 2002 Plan Fill Area – constructed with a Subtitle D compliant alternative liner system
- SE Lateral Expansion 2008 Area – constructed with a Subtitle D compliant alternative liner system (partially closed)
- Phase 1 – constructed with a Subtitle D composite liner system
- Abutment Area – constructed with a Subtitle D composite liner system
- Phase 2 - constructed with a Subtitle D composite liner system.
- Phase 3 - constructed with a Subtitle D composite liner system.

The facilities on site include a Scale Office building, storage/maintenance buildings, a leachate pump station, a leachate/wastewater pump station, and a groundwater pump station. Overall facility mapping is included in the figures in Attachment A.

The Subtitle D composite lined areas have been constructed with a groundwater diversion system, Subtitle D compliant liner system, and leachate collection system. As the horizontal expansion progresses, additional leachate collection lines will be connected to the existing system. Leachate is conveyed to a pump station and then pumped to the leachate/wastewater pump station near the maintenance buildings and then through a force main to the City of Fort Dodge Sanitary Sewer System for treatment and disposal.

A network of monitoring wells has been installed along the perimeter of the solid waste disposal areas to monitor for contaminants.

A.6. Site and environs map

The layout of the site and surrounding area is included on the figures included in Attachment A.

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

Updated ERRAP's are provided with permit renewal documentation as needed. As stated in Special Provision X.2.e of the SDP Permit, "An updated ERRAP shall be submitted at the time of each permit renewal application."

C. Emergency conditions, response activities, and remedial action

C.1. Failure of utilities

C.1.1. Propane

Propane is used for heating in on site buildings.

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, unpleasant working conditions for landfill personnel, and freezing of water lines.

Response Action: The following steps should be implemented in the event of 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 been injured medical attention should be sought immediately and the person removed from risk of further injury if possible. Insure that others are not at risk of being injured.
- Close the service valve at the propane tank if possible.
- Contact the COO and evaluate the situation. If a fire/explosion has occurred or there is an apparent risk of fire/explosion, call 911.
- Contact the propane service provider.

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 system is turned off and conditions are safe, place alternate sources of heat in ideal locations within buildings as needed to provide tolerable working conditions and to keep water pipes from freezing.
- Long-term (>48 hours)-Continue the short-term remedial actions.

C.1.2. Sanitary Sewer

The buildings at the NCIRSWA SLF are connected to the City of Fort Dodge Sanitary Sewer System via a force main. The liquid pumped to the sewer system is primarily leachate combined with a small volume of domestic wastes from the Scale Office building.

Emergency Condition:

- Sanitary services could be interrupted due to a blocked or broken service line, power loss, or off site force main break.

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

- Isolate any overflow sewage and try to contain. Personnel should use caution when handling sewage overflows.
- Temporarily close valves leading to the pump stations.
- Contact the COO.

- Refrain from using facilities that drain into the sewer system. These include restrooms, sinks, and floor drains.
- Contact local plumber 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 sewer system until the system has been repaired.
- Long-term (>48 hours)-Continue the short-term remedial actions. Provide potable water and temporary restroom facilities. Make arrangements for a tanker to haul leachate to the sanitary sewer system/treatment plant for treatment and disposal.

C.1.3. Water

The NCIRSWA SLF is served by the City of Fort Dodge water system. Water is used for domestic purposes such as utility sinks and restrooms. Process water is not used in the operations of the landfill. Should service be disrupted, operations at the facility could go on without interruption.

Emergency Condition:

- Cold temperatures could cause water lines to freeze and possibly burst.
- On-site or off-site trenching operations could damage pipelines and interrupt service.

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

- If a water line has burst or is leaking, shut off water at the nearest valve immediately.
- Contact the COO.
- 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 as needed to provide tolerable working conditions and to keep water pipes from freezing.
- Long-term (>48 hours)-Continue the short-term remedial actions. Provide potable water and temporary restroom facilities.

C.1.4. Electricity

The NCIRSWA SLF utilizes electricity to power the Scale Office building, maintenance buildings, and pump stations.

Emergency Condition: In the event of a power outage:

- The scale and record keeping computer system would not function.
- Lights, machines and handheld motorized tools in the maintenance facilities would not operate.
- Some heating units would not operate
- The pump stations would not operate.

Response Action: The following steps should be implemented immediately in the event of 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. Ensure that others are not at risk of being injured.
- Contact the COO.
- Avoid loose or downed wires. Report loose or downed wires to MidAmerican Energy, 888-427-5632
- Report the outage to MidAmerican Energy, 888-427-5632.
- Make sure all electrical devices that were in use are in the "OFF" position and preferably disconnected from the power source until it is restored.
- Temporarily close valves leading to the pump stations.
- Alternate sources of heat such as kerosene or propane space heaters should be used as needed to provide tolerable working conditions and to keep water pipes from freezing in on site buildings.

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. Temporarily close valves leading to the pump stations.
- Long-term (>48 hours) – Should electrical power remain off for more than 48 hours continue the short-term remedial actions. The leachate and groundwater collection systems should be returned to normal operations as quickly as possible. The COO 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 or making arrangements for a tanker to haul leachate to the sanitary sewer system/treatment plant for 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 the event of an emergency condition.

- Employees carry personal cellular phones that could be utilized to call the appropriate emergency service.
- Contact the COO.

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, large fires or explosions, or other situations endangering personnel or customers.

Response Action: The following steps should be implemented immediately in the event of 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 COO shall notify haulers, local radio, and IDNR that the site is closed. The closure shall also be posted on the NCIRSWA website and Facebook page.

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

- The COO 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 COO shall notify haulers, local radio, and IDNR that the site has been reopened. The reopening shall also be posted on the NCIRSWA website and Facebook page.
- A visual survey of the landfill using the Emergency Checklist in Attachment B 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 area.

C.3. Weather–related events

Staff will be notified of potential hazardous weather events using radios, cellular phones, or other methods.

C.3.1. Tornado and wind events

Tornado watch – tornadoes are possible in and near the watch area.
Tornado warning – a tornado has been sighted or indicated by weather radar.

Damage during tornados is likely to be to overhead electrical systems, site buildings and 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. Note that the NCIRSWA SLF has designated tornado shelters in two buildings at the landfill (Scale Office building and Truck Shed) as well as well as tornado shelters available at the Recycling Center and Household Hazardous Materials building located nearby. Locations of tornado shelters in the referenced buildings are shown on the figures in Attachment C.

Event Emergency Condition:

- A tornado warning has been issued for the area, including the NCIRSWA SLF.

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

- All personnel should be notified of the tornado warning and be instructed to cease operations and seek shelter in the tornado shelter(s) if possible.
- All other persons on site during the warning should be advised of the weather conditions. Personnel should offer directions to others on site to the tornado shelter(s).
- If unable to make it to one of the designated shelters, take shelter in a low lying area or ditch. Use your arms to protect your head and neck. Stay alert to the potential for flooding.

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 on site buildings, the leachate pumping system, the working area, and equipment.

Response Action: The following steps should be implemented immediately in the event of 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. Ensure that others are not at risk of being injured.
- All employees and others known to be on site 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 B 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.
- Wastes caught by 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 Office building - 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 and propane to any damaged areas until it has been verified that the electrical and/or propane systems are 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 Buildings - Suspend maintenance activities in any portion of the building that is damaged until repairs can be made. Turn off electrical power and propane to any damaged areas until it has been verified that the electrical and/or propane systems are safe for use.
  Leachate/Groundwater Pump Stations – Temporarily close valves leading to the pump stations so overtopping does not occur. Make arrangements for a tanker to haul leachate to the sanitary sewer system/treatment plant for treatment and disposal.
  Active Landfill Disposal Areas – Waste that has blown away from the working area shall be gathered and returned to the working area as soon as practical.
- 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 COO 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 COO will contact haulers, local radio, and other affected customers and notify them that the landfill will be temporarily closed due to the hazardous weather conditions. The temporary closure shall also be posted on the NCIRSWA website and Facebook page. The majority of damage during a snow and/or ice event is likely to be to site roads making access to the site difficult.

Event Emergency Condition:

- A blizzard warning, winter storm warning, or ice storm warning has been issued for the area, including the NCIRSWA SLF.

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

- Employees shall be notified of the weather condition and instructed to return to the Scale Office building.

- All other persons on site during the warning will be advised of the weather conditions. Personnel should offer direction to a sheltered area to others on site.

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 NCIRSWA SLF causing the facility to temporarily close.

Response Action: The following steps should be implemented immediately in the event of 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. Ensure that others are not at risk of being injured.
- The COO shall notify haulers and local radio that the site is temporarily closed. The closure shall also be posted on the NCIRSWA website and Facebook page.

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 B 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 COO shall notify haulers and local radio that the site has reopened. The reopening shall also be posted on the NCIRSWA website and Facebook page.
  - Document any damage with notes and/or photographs for insurance purposes.
- Long-term (>48 hours) – Damaged facilities shall be permanently repaired as soon as possible. Until this is accomplished, the short-term remedial actions shall be followed.

C.3.3. Intense rainstorms, mud, and erosion

The NCIRSWA SLF operates under a comprehensive storm water management plan and National Pollutant Discharge Elimination System (NPDES) General Permit No. 1. Stormwater is diverted through various systems to slow water velocity, keep sediment on site, and reduce erosion. The working area is over ¼ mile from the landfill entrance so mud at the entrance is generally not an issue. Mud is removed from site roads to ensure safe driving conditions as needed. Landfill staff inspect the site frequently and make repairs to erosion issues and remove accumulated sediment from retention structures, sediment basins, and ditches 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

Besides causing fires, lightning strikes are dangerous due to the chance of severe or fatal electric shock. The danger is highest just before rainfall begins. Lightning protocols on the working face must be followed and all personnel must leave the area until the all clear is issued by the COO and/or designee. The following personnel safety rules should be obeyed if lightning threatens:

- Stay indoors if possible. Stay away from open doors, windows, metal pipes, and plugged in electrical devices. Do not venture out into exposed areas.
- Do not use the telephone except for emergencies.
- Do not work on metal objects outside such as containers and vehicles.
- Do not handle flammable materials.
- If caught in rubber-tired vehicles, stay in the vehicle with all metal parts (such as loader buckets) lifted off the ground.
- If caught in a metal wheeled or tracked vehicle, shut down the engine and exit the vehicle when safe to do so; seek shelter in buildings, low areas, or rubber-tired vehicles.
- If there is not a shelter nearby, find a low spot and assume the safety position. The safety position consists of squatting down as low as possible while keeping only the soles of the shoes in contact with the ground. The safety position minimizes ground contact area and lowers one's profile.

If someone is struck by lightning and the person is unconscious, do not move the person unless in an exposed area. Apply appropriate first aid. Contact the Fire Department (9-1-1); be sure to tell the dispatcher that the victim has been struck by lightning.

C.3.5. Flooding

Gypsum Creek is located along the east perimeter of the landfill property. No waste disposal areas or landfill infrastructure are located with the 100-year floodplain boundaries of Gypsum Creek. Temporary flooding due to intense localized heavy rain events may occur within the landfill property. If portions of the access road are damaged during flood events staff can use landfill equipment to make temporarily repairs once the flood event is over. In the event of localized flooding at the site, <u>never</u> 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 the event of 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. Ensure that others are not at risk of being injured.
- Upon discovery of a fire, the area immediately around the fire shall be secured to limit access. Direct customers to a safe area.
- Contact the COO and evaluate the situation. If burning material cannot be contained/controlled by landfill staff call 911.
- Materials on fire should be immediately isolated from other material, if safe to do so, using heavy equipment. Personnel should not put themselves in danger.
- The isolated materials should be placed on a soil base and covered with soil, if safe to do so, 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 working area of the landfill.

C.4.2. Buildings and site

All buildings on site were constructed out of fire resistant materials. The steel-framed shells are constructed 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 – the locations of fire extinguishers within the buildings are shown on the figures in Attachment C.

Emergency Condition:

- A fire or explosion has occurred within an on site building.

Response Action: The following steps should be implemented immediately in the event of 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. Ensure that others are not at risk of being injured.
- Isolate the area of the building that is the source of the emergency condition, if possible. Personnel should not put themselves in danger.
- Contact the COO and evaluate the situation. If emergency conditions exist call 911.
- If there is risk of danger, personnel should remove themselves from the area.
- If the burning materials are known to be compatible with chemical fire extinguishers, chemical extinguishers can be used to put out or control flames until other methods of control arrive at the site.
- Document any damage with notes and/or photographs for insurance purposes.

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

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 the event of 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. Ensure that others are not at risk of being injured
- Turn off equipment and isolate the equipment that is the source of the emergency condition, if possible. Personnel should not put themselves in danger.
- Contact the COO and evaluate the situation. If emergency conditions exist call 911.
- If the burning materials are known to be compatible with chemical fire extinguishers, chemical extinguishers can be used to put out or control flames if determined safe to do so 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 eliminated.

C.4.4. Fuels

The NCIRSWA SLF stores various fuels and petroleum products for use in 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. The SPCC is kept on site.

Precautions: The following precautions should be taken around fuels and petroleum products.

- Post no smoking signs and enforce a ban on smoking and open flames near 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 tank has caught fire or exploded.

Response Action: The following steps should be implemented immediately in the event of 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. Ensure that others are not at risk of being injured.
- Isolate the tank that is the source of the emergency condition, if possible. Personnel should not put themselves in danger.
- Contact the COO and evaluate the situation. If emergency conditions exist call 911.

- If the burning materials are known to be compatible with chemical fire extinguishers, chemical extinguishers can be used to put out or control flames until other methods of control arrive at the site.

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

C.4.5. Utilities

Due to the nature of most of the utilities at the facility the risk for fire or explosion is minimal. The propane storage tank and electrical infrastructure are utilities with a potential for fire or explosion.

Emergency Condition:

- The propane storage tank or an electrical service component has caught fire or exploded.

Response Action: The following steps should be implemented immediately in the event of 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. Ensure that others are not at risk of being injured.
- Contact the COO and evaluate the situation. If emergency conditions exist call 911.
- Follow the response actions in Section C.1.1 (Propane) or Section C.1.4 (Electricity).

Remedial Action: Once the initial response has been completed and emergency conditions no longer exist follow the remedial actions in Section C.1.1 (Propane) or Section C.1.4 (Electricity).

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 the event of 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 other material, if safe to do so, using heavy equipment. Personnel should not put themselves in danger.
- The isolated materials should be placed on a soil base and covered with soil, if safe to do so, to reduce the possibility of the spread of fire to other waste.
- Contact the COO and evaluate the situation. If burning material cannot be contained/controlled by landfill staff call 911.

- If the burning materials are known to be compatible with chemical fire extinguishers, chemical extinguishers can be used to put out or control flames until other methods of control arrive at the site.

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

C.4.8. Hot loads

Emergency Condition:

- Occasionally a 'hot' load may be dumped, without staff knowledge, at the landfill causing a threat of fire to waste materials.

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

- If there is risk of danger, personnel should remove themselves from the area immediately.
- A suspected hot load should be immediately isolated from other wastes, if safe to do so, using heavy equipment. Personnel should not put themselves in danger.
- The isolated materials should be placed on a soil base and covered with soil, if safe to do so, to reduce the possibility of the spread of fire to other waste.
- If the burning materials are known to be compatible with chemical fire extinguishers, chemical extinguishers can be used to put out or control flames until other methods of control arrive at the site.

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

C.4.9. Waste gases

Volatile gases are 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 or landfill infrastructure, pressure builds, and an ignition source is present, the gases could ignite. At the NCIRSWA SLF this could occur in two primary ways; gases could become trapped in pockets within the waste mass, or gases could migrate and become concentrated within on site buildings or structures.

Emergency Condition:

- Waste gases within the waste mass catch fire.

Response Action: The following steps should be implemented immediately in the event of 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. Ensure that others are not at risk of being injured.
- Contact the COO and evaluate the situation. If emergency conditions exist call 911.

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 sources of concentrated landfill gas. Once the source(s) are found use on site 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 or Structures: On site buildings or structures could trap gases migrating from the waste mass creating a risk for fire or explosion when exposed to an ignition source. Explosive gas levels are measured quarterly at several locations including the interior of on site buildings, at property lines, and at subsurface gas probes.

Emergency Condition:

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

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

- Direct personnel to evacuate the affected building.
- If anyone has incurred injuries, medical attention should be sought immediately and the person removed from risk of further injury if possible. Ensure that others are not at risk of being injured.
- Contact the COO and evaluate the situation. If emergency conditions exist call 911.
- Ventilate affected buildings or structures, if safe to do so, by opening doors, windows, access hatches, and any other opening or vent that will allow air to circulate in the building or structure.
- If monitoring indicates gas concentrations exceeding 25% of the lower explosive limit for methane in buildings or structures notify IDNR within 7 days of monitoring event.
- If monitoring indicates gas concentrations exceeding the lower explosive limit for methane in gas probes or at the facility property boundary notify IDNR within 7 days of monitoring event.

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) – Explosive gases should be monitored daily in all buildings and structures. Sources of explosive gas in the building/structure or vicinity should be identified and eliminated.
- Long-term (>48 hours) – If the source of explosive gases is not found the building or structure should be temporarily abandoned. The building or structure should not be used until a permanent ventilation system to control explosive gases is installed.

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 the event of an emergency condition.

- Immediately evacuate the area following the procedures in Section C.2, Evacuation.
- Call 911 and give the dispatcher the location of the explosive material.

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 area throughout the day. Once placed at the working area 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 area during compaction. Fences are used to limit the movement of windblown litter. Collection of windblown litter occurs on site and on adjacent properties as necessary.

C.5.2. Leachate

Leachate is collected at the NCIRSWA SLF through a piping collection network that discharges to a leachate pump station. From the pump station leachate is pumped to the leachate/wastewater pump station near the maintenance buildings and then pumped through a force main to the City of Fort Dodge Sanitary Sewer System for treatment and disposal. Spills or releases could potentially occur in four primary ways: leachate seeps from the waste mass, leakage through the base of unlined landfilling areas, leakage through the landfill liner, and leakage outside of the solid waste boundary from the leachate collection and conveyance system.

Leachate Seeps from the Waste Mass: The flow of leachate to the leachate collection system can be stopped by compacted lifts or soil cover 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 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.

Leakage Through the Base of Unlined Landfilling Areas/Leakage Through the Landfill Liner: The NCIRSWA SLF has a series of perimeter monitoring wells downgradient of waste disposal areas that are monitored on a regular basis. Should contamination be found during monitoring, the IDNR will be notified and a Site Remedial Action and Mitigation Plan (SRAMP) and Groundwater Quality Assessment Plan (GQAP) completed if necessary.

Leakage from Leachate Collection and Conveyance System: Components include the leachate collection and conveyance piping, leachate force mains, and pump stations. All components of the leachate collection and conveyance system are constructed to meet or exceed IDNR sanitary sewer standards. If leakage is noted from the leachate collection and conveyance system the valves in the leachate collection system should be temporarily closed and pump stations temporarily shut down until the location of the leakage is isolated. When the

leakage is isolated, portions of the leachate collection and conveyance system that do not contribute to the leaking area can resume normal operations. Arrangements can be made with a third party to haul leachate to the sanitary sewer system/treatment plant for treatment and disposal if needed. The leak shall be repaired as soon as possible so normal operations of the leachate collection and conveyance system can resume.

C.5.3. Waste gases

Hazards associated with the presence of landfill gas (LFG) include the following:

- Fires and explosions may occur in the presence of LFG. Methane (CH_4), is a flammable, colorless, odorless, and tasteless gas that typically comprises about 50 percent of LFG.
- Carbon Dioxide (CO_2) can occur in LFG up to approximately 50 percent. Although CO_2 is not toxic or flammable, it is heavier than air and can displace oxygen in confined spaces.
- LFG may cause an oxygen deficiency in underground trenches, vaults, conduits, manholes, and structures. Confined-space entry procedures (i.e., forced ventilation, personal protective equipment (PPE), monitoring, etc.) should be followed when such structures are entered.
- Hydrogen sulfide (H_2S) also may be present in LFG. H_2S is a colorless, very flammable gas that, in low concentrations, has an offensive odor similar to that of rotten eggs. H_2S can be highly toxic. At higher concentrations, it will instantly deaden the sense of smell and cause death within seconds by interfering with the nerve and motor centers in the brain.

Because it is odorless and tasteless, methane is undetectable by the human senses. Therefore, sampling personnel must be aware of the potential for presence of methane and avoid all possible sources of ignition. When monitoring for waste gases sampling personnel, including outside contractors, may be required to wear personal methane detector badges, self-contained breathing apparatus (SCBA), and other PPE.

As per IDNR regulations, explosive gas concentrations are monitored on a quarterly basis. Explosive gas levels are taken at several locations including the interior of on site buildings, at property lines, and at subsurface gas probes. In the event of a landfill gas release see Section C.4.9, Waste gases.

C.5.4. Waste stockpiles and storage facilities

Appliances: Appliances accepted at the landfill are placed in a designated metal container and removed by a recycler when quantities warrant.

Tree and Brush Debris: Tree and brush debris accepted at the landfill are stockpiled in a designated area and burned per permit approval when quantities warrant and weather conditions are favorable.

Concrete Rubble: Concrete rubble accepted at the landfill is stockpiled in the designated area. The rubble is ground when quantities warrant and the ground material is used on site.

Scrap Metal: Scrap metal received at the site is placed in a roll off container and removed by a recycler when quantities warrant.

Tires: Tires accepted at the landfill are stockpiled in the designated area and removed by a recycler when quantities warrant.

C.5.5. Waste transport systems

- On occasion, a vehicle containing waste may overturn and spill waste on site. If this occurs, first aid will be administered and the area made safe prior to cleaning any spill.
- Spill cleanup will consist of using on-site equipment (e.g., front loader or similar) to collect the spilled material and transport the material to the working face.
- Should a vehicle containing other waste (not municipal solid waste (MSW)) have a spill or accident, the "Storm Water Pollution Prevention Plan" and/or the “Spill Prevention, Control, and Countermeasures Plan? will be used as a guide to actions for proper clean up.

C.5.6. Litter and airborne particulates

- Litter must be controlled both on and off the landfill site in accordance with IAC 567-113.8(3). Litter is best controlled at its source through proper handling. Litter is caused by open loads, windy day operations and operational techniques.
- Controlling litter from vehicles entering or leaving facilities requires the cooperation of haulers and enforcement by landfill staff. All haul vehicles entering the site should be covered or enclosed to prevent littering. Landfill staff must also monitor to make sure the netting or "tarp" used to control litter on haul vehicles is functioning properly. Landfill personnel should verify that the covering is in place as the vehicle enters the disposal area. Enforcement by staff may entail rejecting unsecured loads or levying a surcharge to help offset the cost of litter cleanup.
- Windblown litter can be minimized by using fill sequencing to develop wind protected disposal areas, utilizing portable fencing downwind of the working face to confine blowing debris, installing perimeter fences, and planting windbreaks.
- Operational techniques that contain litter include confining the tipping area, compacting waste quickly after delivery, covering small areas on the working face as soon as they fill during the day, or closing during periods of excessive winds. Litter fencing has been installed around the working face to intercept blowing debris. Portable litter fencing will be used as necessary.
- Litter is routinely collected from the landfill site and off-site. A daily litter log is maintained on site.

Other airborne particles at the Landfill site consist primarily of dust.

- Dust is caused by the moving and placement of excavated soil and by traffic on unpaved roads within the landfill area. Soil movement is part of daily landfill operations (e.g., daily and intermediate cover) and part of the

landfill construction process. Truck traffic on unpaved roads occurs during landfill operational hours when refuse vehicles are directed to the working face.

- Dust controls are designed to minimize releases of dust from the landfill access road and on-site roads. All interior roadways should be inspected, scraped, graded, or otherwise maintained on a daily basis as required by prevailing conditions. This includes placement of sufficient rock or fill material or dust suppressant on the roadways. Rock and other fill material should be of a size and density to withstand disintegration due to passage of heavy equipment and over-the-road vehicles.
- Dust is controlled on gravel access and haul roads by watering the roads as needed. The landfill has a water truck on site for dust control.

C.5.7. Site drainage systems

Three types of regulated materials could potentially be released into the drainage systems at the NCIRSWA SLF, 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

Off-site releases of regulated wastes are extremely uncommon at the NCIRSWA. Should an off-site release occur, measures will be taken to contain the release and remediate the release. Remediation measures include isolating the contaminant and removing the contaminant for placement in the proper facility. This will likely include burial of the contaminant in the landfill (e.g., off-site litter).

For liquid releases (e.g. leachate) the liquid will be contained and pumped into a transport vehicle for proper disposal. Contaminated soils will be excavated and placed in the disposal area.

The NCIRSWA SLF has perimeter monitoring wells downgradient of waste disposal areas that are monitored in accordance with the IDNR approved Hydrologic Monitoring System Plan. Should contamination be found in these wells during 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 NCIRSWA SLF does not accept hazardous waste for disposal at the working area. Waste is unloaded only when a certified operator is on duty; therefore, personnel can visually monitor loads during unloading and compaction for signs of hazardous waste or other banned substances. It is the responsibility of the hauler to retrieve any hazardous waste found at the working area and properly dispose of not only the hazardous waste, but any other waste that may have been contaminated by the hazardous waste.

The landfill operators visually inspect loads of waste at the working face before burial. Random inspections, as required by RCRA Subtitle D, Part 258.20, are also conducted per the waste screening policy adopted by the NCIRSWA.

C.6.2. Mixed waste deliveries

If hazardous waste 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 waste.

C.6.3. Fuels

The NCIRSWA SLF stores various fuels and petroleum products for use in 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.

There are various vessels onsite for the storage of petroleum products:

- 1,000 gallon diesel tank with secondary containment. Located within a building.
- 300 gallon waste oil tank with secondary containment. Located within a building.
- Hydraulic fluid, engine oil, and gear lube for vehicle maintenance. The materials are stored in secondary containment. Located within a building.

Emergency Condition: The spill of petroleum products will require immediate action to prevent further spillage and ensure that any 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 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.
- Take necessary steps to protect personnel and equipment from fire hazards. Remove sources of ignition from spill area.
- Take necessary steps to protect personnel from direct or indirect contact with spilled materials, and utilize PPE as necessary.

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

- Notify the applicable regulatory agencies as required by IDNR and EPA regulations included in Attachment D.
- 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 NCIRSWA SLF. In the event of a landfill gas release see Section C.4.9, Waste gases.

C.6.5. Site drainage systems

Spills or releases of hazardous substances are not likely to get into on site drainage systems. Spills at the working area can be contained with soils or wastes until proper removal can be arranged.

C.6.6. Off–site releases

The NCIRSWA SLF does not store or have any hazardous substances on site in significant quantities such that a spill or release could potentially migrate off site. Petroleum products stored on site are stored in the designated buildings with secondary spill containment.

C.7. Mass movement of land and waste

C.7.1. Earthquakes

The NCIRSWA SLF is at a very limited risk for an emergency condition due to damage caused by seismic events. Webster County lies in the "Lowest Hazard" for earthquake activity according to 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

To comply with state regulations, liner slopes must be designed with a maximum 3:1 grade and closure cap slopes a maximum of 4:1 grade. Leachate is also drained from the waste mass to reduce the risk of slope failure. The areas with the highest risk of slope failure at the NCIRSWA SLF would be side slopes of the final cover of the closed landfilling areas and the side slopes of the working area. A lift method is typically used to place the solid waste which reduces the risk of slope failure. 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 working area. Repair of an existing slip plane is scheduled to be completed late in 2025.

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, depressions may be created on the surface of the cover. Settlement occurs over a period of time and does not, on its own, necessarily 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 should be monitored for damage.

C.8. Emergency and release notifications and reporting

C.8.1. Federal Agencies

See Attachment E.

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

C.8.2. State Agencies

See Attachment E.

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

C.8.3. County and city agencies including emergency management services

See Attachment E.

C.8.4. News media

See Attachment E.

The COO or designee will review the situation, evaluate the options, and recommend who should be contacted.

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

Fort Dodge, Coalville, and Otho are within a 5 miles radius of the landfill. In the event of an emergency, the Fort Dodge Police Department and Webster County Sheriff's Office will be alerted to aid in the notification of special populations within a 5 mile radius of the landfill. The special populations within this 5 mile radius are listed below:

- Fort Dodge Community School District. There are numerous district facilities are within 5 miles of the landfill. In the event of an emergency, the School District Main Office (515-576-1161) will be notified, if necessary.
- Daycares, preschools, nursing homes, churches, private schools, etc. Due to the number of these facilities within a 5 miles radius of the landfill, and an unknown number of unregistered home daycares, NCIRSWA personnel contacting these facilities in the event of an emergency is not practical. The Webster County Sheriff's Office and the Fort Dodge Police Department 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 D. 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 D.

C.9. Emergency waste management procedures

C.9.1. Communications

During an emergency regarding waste management practices, internal communication via on-site radios or cellular phones will be conducted as normal. External communication with news media, landfill customers, and the general public will be conducted by the COO or NCIRSWA designee. Requests for comment or information from the media shall be directed to the COO.

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. The COO shall notify haulers, local radio, and IDNR that the site is temporarily closed. The closure shall also be posted on the NCIRSWA website and Facebook page.

Long Term (>48 hours): Wastes would have to be stored at the source or hauled to alternate landfill facilities until waste acceptance could resume. The COO shall

notify the alternate landfill(s), haulers, local media (radio, television, and newspaper), and IDNR that the site is closed until further notice and provide information on alternate landfill(s) to the haulers, local media, and IDNR. The closure and supporting information shall also be posted on the NCIRSWA website and Facebook page.

C.9.3. Facilities access and rerouting

There are currently two access points to the landfill, one public access and the other only used by staff. 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 working area.

C.9.4. Waste acceptance

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

C.9.5. Wastes in process

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

C.10. Primary emergency equipment inventory

C.10.1. Major equipment

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

- 3 Bulldozers
- 2 Excavators
- 2 Haul Trucks
- 1 Landfill Compactor
- 1 Grader
- 1 Front End Loader
- Water Truck
- 2 Ford Pick Ups
- 2 Chevy Pick Ups
- Skid Loader
- Con-Cover Machine
- Kubota RTV
- 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. The locations of fire extinguishers within the buildings are shown on the figures in Attachment C. Water at low volumes is available in the maintenance building.

There is also a city fire hydrant located approximately 1 mile from the landfill gate.

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 dial 911 and provide the following information:

Your name and the NCIRSWA Sanitary Landfill.
Description of the emergency.
Location of the emergency.
Contact person at the scene.
DO NOT HANG UP unless directed to do so OR personal safety is in jeopardy.

C.11.2. Medical and Emergency services

See Attachment E.

C.11.3. Contracts and agreements

Not applicable.

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 NCIRSWA personnel files.

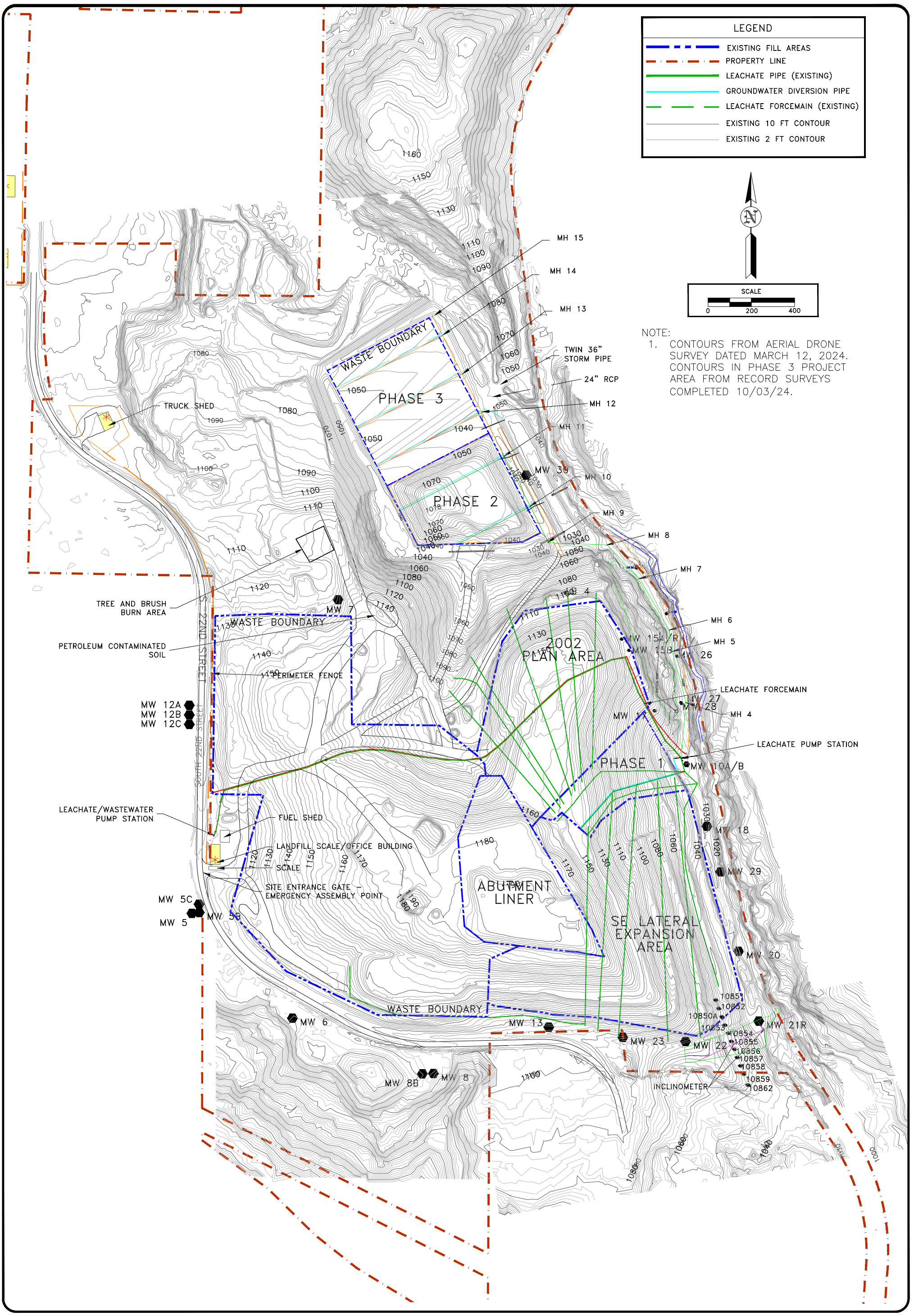
ATTACHMENT A

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

BUILDING LOCATIONS
EMERGENCY RESPONSE AND REMEDIAL ACTION PLAN
NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 1

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030–25A	DATE 7/21/2025



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

OVERALL SITE MAP
EMERGENCY RESPONSE AND REMEDIAL ACTION PLAN
NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: 2

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030–25A	DATE 7/21/2025

ATTACHMENT B

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?

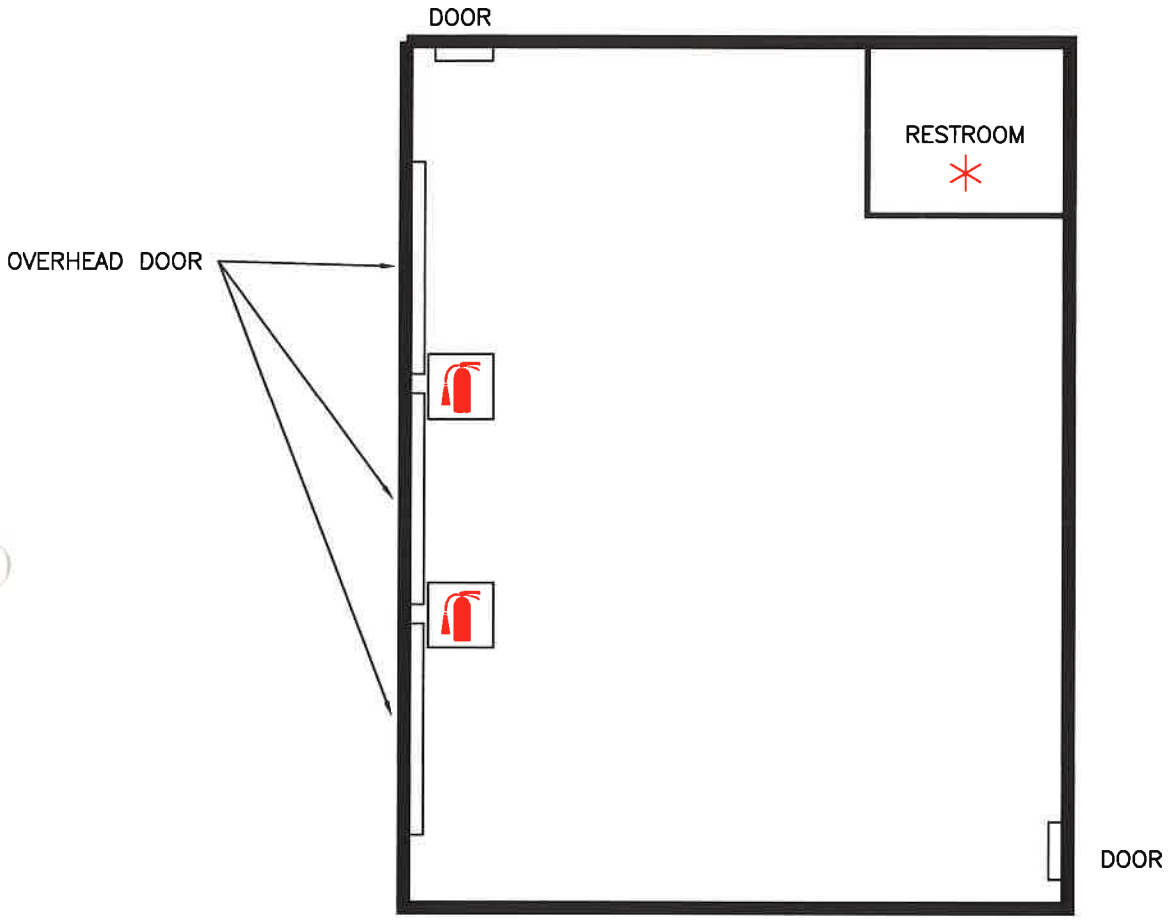
ATTACHMENT C

HLW Engineering Group

LANDFILL SCALE/OFFICE AREA
EMERGENCY RESPONSE AND REMEDIAL ACTION PLAN
NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: A

REVISION	NO.	DATE
	1	7/17/2025
DRAWN	PROJECT NO.	DATE
JGH	6030-19A	10/7/2020



✳ TORNADO SHELTER

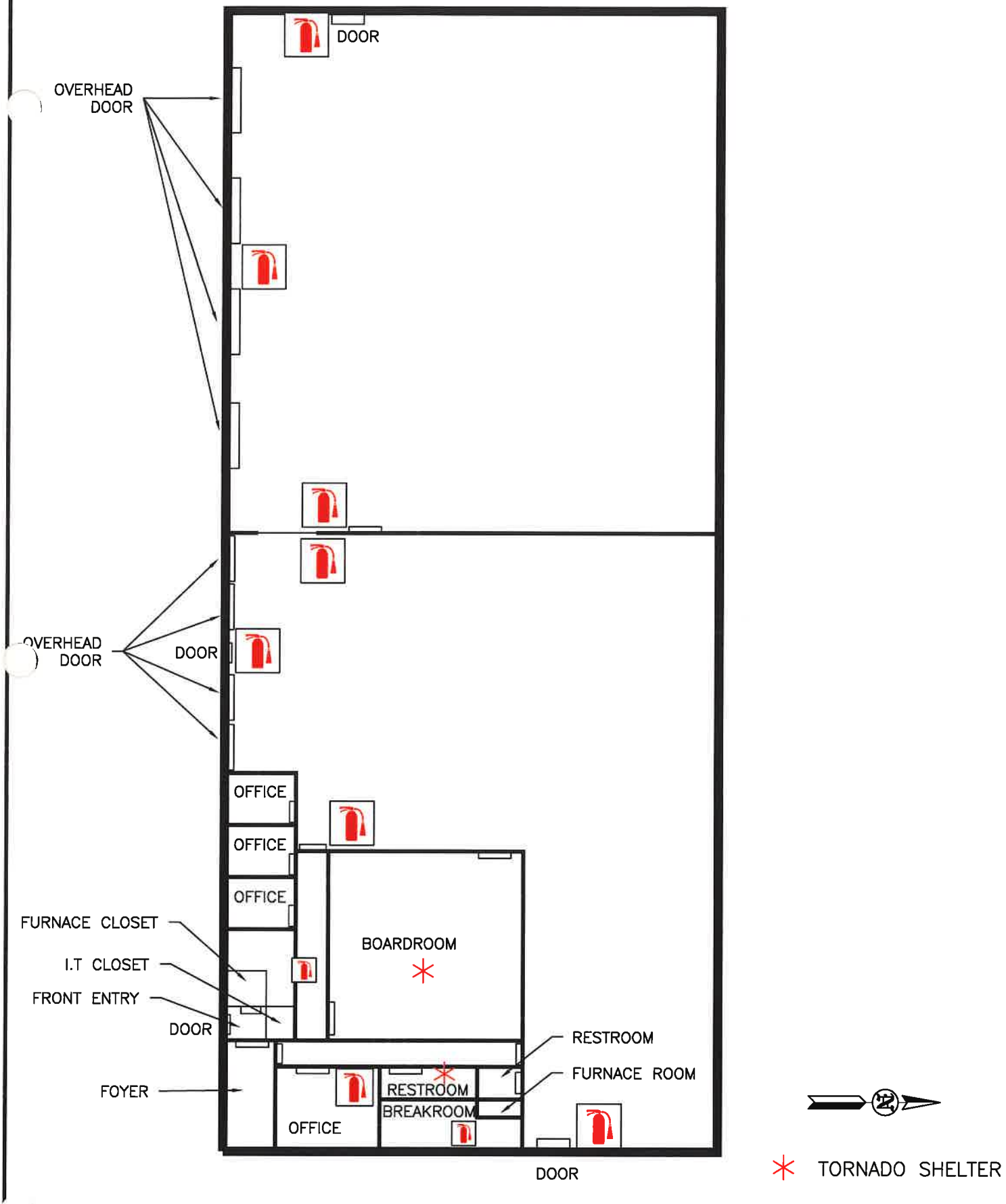
HLW Engineering Group

TRUCK SHED
EMERGENCY RESPONSE AND REMEDIAL ACTION PLAN
NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: B

REVISION	NO.	DATE

DRAWN	PROJECT NO.	DATE
JGH	6030-19A	8/6/2020

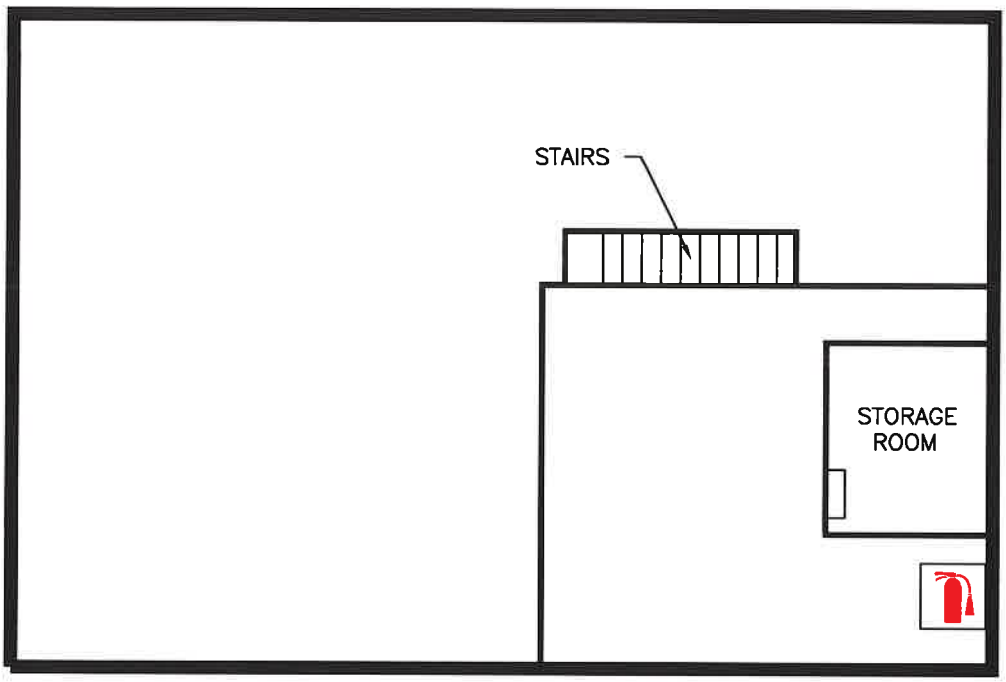


HLW Engineering Group

REGIONAL RECYCLING BUILDING
EMERGENCY RESPONSE AND REMEDIAL ACTION PLAN
NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: C-1

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-19A	DATE 10/7/2020



2ND FLOOR – REGIONAL RECYCLING BUILDING

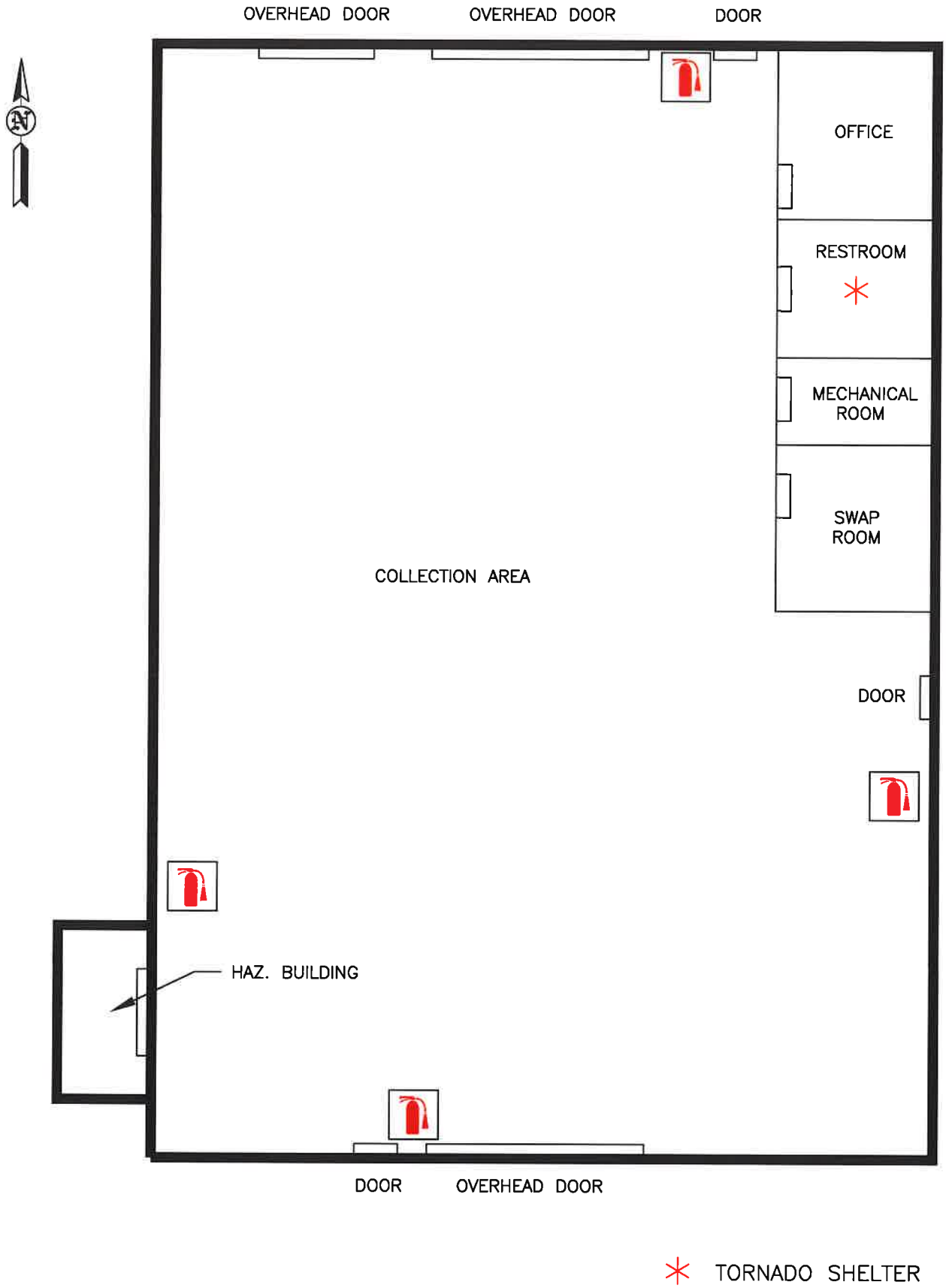
✳ TORNADO SHELTER

HLW Engineering Group

REGIONAL RECYCLING BUILDING
EMERGENCY RESPONSE AND REMEDIAL ACTION PLAN
NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: C–2

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030–19A	DATE 8/6/2020



HLW Engineering Group

HHM BUILDING

EMERGENCY RESPONSE AND REMEDIAL ACTION PLAN

NCIRSWA SANITARY LANDFILL
FORT DODGE, IOWA

FIGURE: D

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6030-19A	DATE 10/7/2020

ATTACHMENT D

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 **www.iowadnr.gov/Portals/idnr/uploads/fo/fo_factsheet.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. 1/2019

IOWA DNR EMERGENCY RESPONSE UNIT
502 E. 9TH STREET / DES MOINES, IOWA 50319-0034
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 <u>potential</u> 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
502 E. 9TH STREET / DES MOINES, IOWA 50319-0034
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 502 E. 9th Street Des Moines, IA 50319-0034	515/281-7229	Emergency_Response@dnr.iowa.gov

Electronic 30-Day Written Report Submission

If you have been asked to submit a 30-Day Written Report to the Department of Natural Resources per Iowa Administrative Code 131.2(2) you have three options.

1. Submit the report on line using the DNR's new Online Hazardous Substance Incident Database,
2. Submit an electronic copy of the attached form via e-mail to the e-mail address listed on the bottom of the form, or
3. Mail a hard copy of the attached form to the address listed on the bottom of the form.

Each option is explained in greater detail below. Keep in mind the report is due within 30 days of the incident unless an exception is made by the investigating DNR staff member. If you have any questions please contact your local DNR Field Office or IDNR's Field Services Emergency Response during normal business hours at 515-725-0386.

Online Submittal

Go to the DNR's spill reporting website www.iowadnr.gov/spills/index.html. Click on the *30 Day Report* link in the menu on the left hand side or you can go to the spill reporting page directly by entering www.iowadnr.gov/spills/onlinereporting.html. This page contains links to several guidance documents and links to the DNR Record Center and the DNR Field Office web pages. To begin the submittal process click on the link https://programs.iowadnr.gov/hazardousspills/Introductory.aspx near the bottom of the page. You will be taken to the DNR's Online Hazardous Substance Incident Database.

Click on the login icon in the upper right side of the page. You will be taken to the State of Iowa's Enterprise A & A login system. Iowa's Enterprise A & A login system is used to log state employees, contractors and the public in to a number of state databases including; the Sex Offender Registry, Unemployment Insurance Tax System (UITS), Engineers License Renewal System, Amber Alerts, and others.

- If you do not have an Enterprise A & A account click on the tab labeled "Create An Account" and follow the directions.
- If you have an Enterprise A & A account log in as normal.

Once you have logged in you will automatically be directed back to the web site and logged in as a responsible party. The system will take you to the spill list and authorization request page. The spill list will contain all spills you've requested access to and allow you to request access to other incidents.

To find the incident report you will be submitting information for follow these steps:

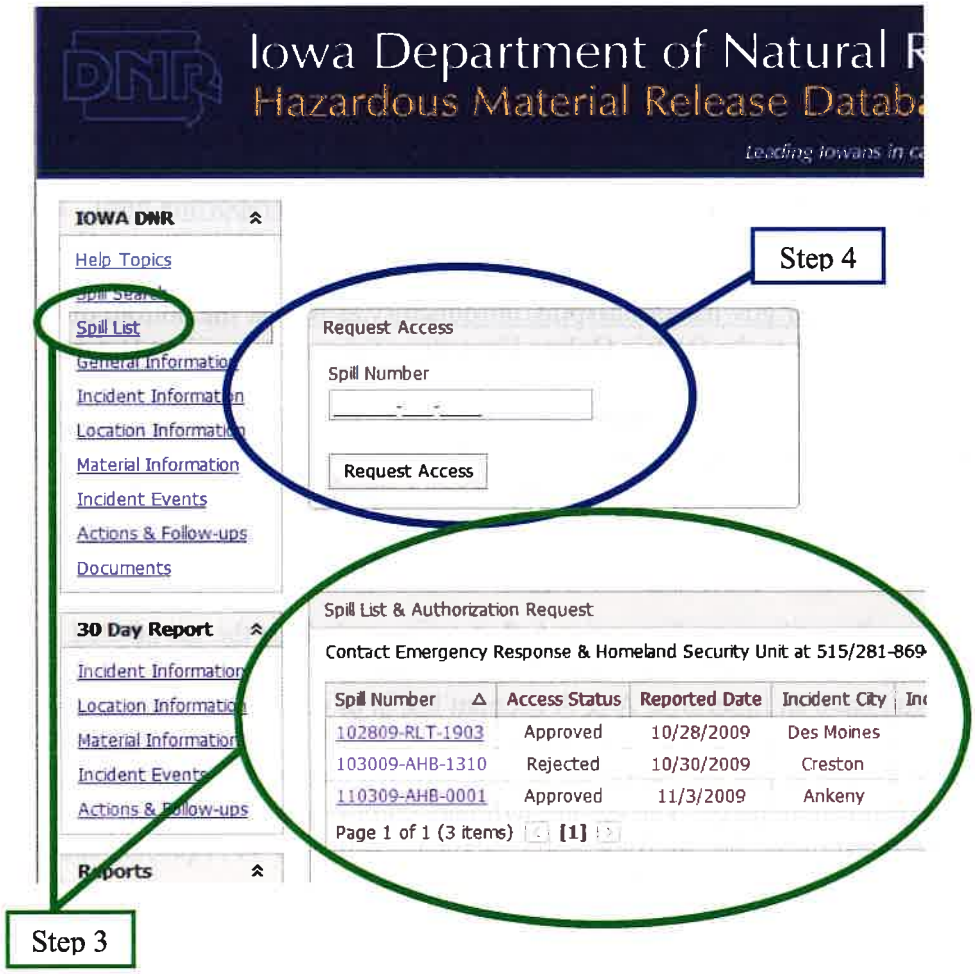
1. If you know the spill/incident number for the incident you wish access to skip to Step 3. Otherwise, search the database using at least one of the parameters

listed on the search page and click search. A table with incidents meeting your criteria will be listed below the search fields.

2. Record the Spill Number corresponding to the incident you want access to. The spill number is listed on the left side of the table.
3. From the menu in the upper left select "Spill List". This will bring up all the spills you currently have been granted access to and a "Request Access" box.
4. If the incident is not in your spill list enter the spill number (either from 2 above or from the spill number you've been given) in the space marked "Spill Number" in the "Request Access" section. See figure below.

Once you've requested access an e-mail is sent to the system administrators. They will either; approve your request, reject your request, or contact you for further information.

Once granted access you will receive an e-mail approving your request and the spill information will show up in your spill list table. Click on the spill number and you'll be taken to the data entry screens.



Submit Form By E-mail
If you are unable to submit online, but can submit via e-mail please send the 30-Day Written Report form and any supporting/requested information to:

Emergency_Response@dnr.iowa.gov.

You can submit using a scan of the attached form, a copy of the form from the DNR Spills website, or any form that contains the required information listed in IAC 131.2(2).

Submit Form By Mail
While the department would prefer 30-Day Written Reports be submitted through the online system or electronically by e-mail we continue to accept them in hardcopy form via the mail. You can submit using a copy of the form from the DNR Spills website or any form that contains the required information listed in IAC 131.2(2). The form and any supporting/requested information should be sent to the field office staff member investigating the incident or to DNR Field Services Emergency Response at the address below:

Iowa Department of Natural Resources
Attn: Field Services Emergency Response
502 E. 9th Street
Des Moines, IA 50319-0034

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 502 E 9th St Des Moines IA 50319	515-281-7229	Emergency_Response@dnr.iowa.gov

Thank You

United States Environmental Protection Agency
Office of Emergency Management (5104A)
EPA-550-F-06-006
December 2006
www.epa.gov/emergencies

Oil Discharge Reporting Requirements

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 (NRC) 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 (MSO) 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

- 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 (OSC), 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 (RA) 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.

For More Information

Review the Discharge of Oil regulation (40 CFR part 110)
http://www.gpoaccess.gov/cfr/

Review the Oil Pollution Prevention regulation (40 CFR part 112)
http://www.gpoaccess.gov/cfr/

Visit the EPA Office of Emergency Management Web site
www.epa.gov/emergencies

Call the Superfund, TRI, EPCRA, RMP, and Oil Information Center
(800) 424-9346 or (703) 412-9810
TDD (800) 553-7672 or (703) 412-3323
www.epa.gov/superfund/resources/infocenter

To Report an Oil or Chemical Discharge

Contact the National Response Center
(800) 424-8802 or (202) 267-2675
TDD (202) 267-4477
http://www.nrc.uscg.mil/index.html

When are You Required to Report an Oil Spill and 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 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.

The requirement for reporting oil spills stems from the Discharge of Oil Regulation, 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. For more information on reporting oil discharges, please see: Oil Discharge Reporting Requirements: How to Report to the National Response Center and EPA

Hazardous Substances

For releases of hazardous substances, the federal government has established Superfund Reportable Quantities (RQs). If a hazardous substance is released to the environment in an amount that equals or exceeds its RQ, 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) 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 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.

LAST UPDATED ON MARCH 14, 2017

EPA United States Environmental Protection Agency

What Information is Needed When Reporting an Oil Spill or Hazardous Substance Release?

Reporting a hazardous substance release or oil spill takes only a few minutes. To report a release or spill, contact the federal government's centralized reporting center, the National Response Center (NRC), at 1-800-424-8802. The NRC is staffed 24 hours a day by personnel who will ask you to provide as much information about the incident as possible. Please include the following:

- Your name, location, organization, and telephone number
- Name and address of the party responsible for the incident; or name of the carrier or vessel, the railcar/truck number, or other identifying information
- Date and time of the incident
- Location of the incident
- Source and cause of the release or spill
- Types of material(s) released or spilled
- Quantity of materials released or spilled
- Medium (e.g. land, water) affected by release or spill
- Danger or threat posed by the release or spill
- Number and types of injuries or fatalities (if any)
- Weather conditions at the incident location
- Whether an evacuation has occurred
- Other agencies notified or about to be notified
- Any other information that may help emergency personnel respond to the incident

If reporting directly to the NRC is not possible, 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. In general, EPA should be contacted if the incident involves a release to inland areas or inland waters. The U.S. Coast Guard should be contacted for releases to coastal waters, the Great Lakes, ports and harbors, or the Mississippi River. EPA or the U.S. Coast Guard will relay release and spill reports to the NRC promptly.

For more information, please see: Reporting Spills and Environmental Violations

LAST UPDATED ON AUGUST 1, 2019

ATTACHMENT E

Emergency Contact List

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

- Your name and "North Central Iowa Regional Solid Waste Agency."
  - 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 (2240 Gypsum Hollow Road).
  - 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
901 N. 5th Street
Kansas City, KS 66101
Phone: 913-281-0991
http://www2.epa.gov/aboutepa/epa-region-7-midwest

National Pesticide Information Center
Phone: 800-858-7378
http://npic@ace.orst.edu

National Response Center
National Response Center Commandant
c/o U.S. Coast Guard (CG-3RFP-2)
2100 2nd Street, SW, Room 2111B
Washington, DC 20593-0001
Phone: 202-267-2675
800-424-8802
http://www.nrc.uscg.mil

Emergency Planning and Community Right-to-Know Information Hotline (EPCRA)
EPCRA Information Hotline
Booz Allen & Hamilton, Inc.
8283 Greensboro Dr
McLean, VA 22102
Phone: 703-412-9810
800-535-0202

Air, RCRA and Toxics Division
USEPA Region 7 (ARTD/CRIB)
11201 Renner Blvd.
Lenexa, KS 66219
Phone: 913-551-7315

United States Department of Transportation (DOT)
1200 New Jersey Avenue, SE
Washington, DC 20590
Phone: 202-366-4000
http://www.dot.gov

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. 2
2300 15th St. SW
Mason City, IA 50401
Phone: 641-424-4073

3. County and city agencies including emergency management services

Law Enforcement
Webster County Sheriff Department
702 1st Ave S #1
Fort Dodge, IA 50501
Emergency: 9-1-1
Non-Emergency Phone: 515-573-1410

Medical Emergency
Emergency: 9-1-1
Unity Point Regional Medical Center
802 Kenyon Road
Fort Dodge, IA 50501
Non-Emergency Phone: 515-573-3101

Fire and Rescue
Fort Dodge Fire and Ambulance Service
Emergency 9-1-1

Non-Emergency Phone: 515-576-1031

Emergency Response Agencies and Contact Information
Webster County Health Department
723 1st Ave S
Fort Dodge, IA 50501
Phone: 515-573-4107

Webster County Emergency Management
702 1st Ave S
Fort Dodge, IA 50501
Phone: 515-573-1403

4. Utilities

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

Propane
New Century FS - Manson
Phone: 888-437-3835

Water & Sewer
USW
Phone: 515-576-4948
Fort Dodge Public Works
Phone: 515-955-6139

5. Major Haulers

Pederson Sanitation, 515-955-4190
Engman, 515-332-4311
Bennett Sanitation, 515-379-1651
Carroll Refuse Service, 712-792-5001
Walters Sanitation, 515-576-3959
Trash Man, 515-832-5516
Hamilton County Transfer Station, 515-539-4420
Shuttler Sanitation, 712-469-2624
Speedy Dump, 515-332-3867
Jim's Roll-Offs, 515-879-2716
Advanced Waste Solutions, 888-548-3578
American Sanitation, 515-835-0695
City of Humboldt, 515-332-3435
City of Fort Dodge, 515-269-3998

TCB, 515-571-9435

6. News Media

Radio
Alpha Media, 515-955-5656
- KWMT AM (540)
- KVFD AM (1400)
- KZLB FM (92.1)
- KKEZ FM (94.5)
- KIAQ FM (96.9)
- KXFT FM (99.7)
- KTLB FM (105.9)

Television
KCCI TV, 515-233-0438
Newspaper
Fort Dodge Messenger, 515-573-2141

APPENDIX 3

Certified Landfill Operators for NCIRSWA Sanitary Landfill

Jason Potts - #31213

Levi Porter - #31022

Terry Michehl - #31017

Paul Korf - #31144

Austin Hauge - #31209

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 NCIRSWA SLF operates under the following permits related to air quality:

- IDNR Air Quality Construction Permit (Permit 11-A-243-S2) dated July 12, 2024
- IDNR Title V Operating Permit (Permit 20-TV-002R1) dated April 14, 2025, expires April 13, 2030

113.9(2) Landfill Gas

The Gas Monitoring System Plan (GMSP) dated June 14, 2018 (Doc #92593) was approved by IDNR on June 25, 2018 (Doc #92666). Modification of the GMSP related to SG-4 (GP-4) was approved June 18, 2024 (Doc #110273) and modification of the GMSP based on completion of the Phase 3 Expansion was approved on October 18, 2025 (Doc #111091).

Approved monitoring points included in the Revised Permit dated February 26, 2025 (Doc # 112416) include:

Subsurface Gas Probes	Monitoring Wells	Underdrains	Buildings
SG-1 (a.k.a. GP-1)	MW-8 (a.k.a. MW-8A)	GU-1 (manhole)	Scale House
SG-2 (a.k.a. GP-2)	MW-10A	GU-2	Shop
SG-3 (a.k.a. GP-3)	MW-13	GU-3	
SG-4 (a.k.a. GP-4)	LB-4	GU-4	
		GU-5	
		GU-6	

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

The Hydrologic Monitoring System Plan (HMSP) dated June 14, 2018 (Doc #92593) was approved by IDNR on June 25, 2018 (Doc #92666). Modification of the HMSP related to completion of the Phase 3 Expansion was approved on October 18, 2025 (Doc #111091). MW-19 was destroyed in 2025 and was replaced with MW-29. Approval of MW-29 is included in the Revised Permit dated February 26, 2025 (Doc # 112416).

113.10(2) Groundwater Monitoring Systems

Groundwater monitoring shall be as per the approved HMSP. The HMSP wells are as follows: MW-10A, MW-10B , MW-18, MW20, MW-21R, MW-22, MW-25, MW-28, MW-29, MW-30, MW-31, MW-32, GU-2, GU-3, GU-4, GU-5, and GU-6.

113.10(3) Surface Water Monitoring Systems

Surface water monitoring is not warranted at the site and is not included in the HMSP. An NPDES storm water sampling event is performed annually.

113.10(4) Groundwater Sampling and Analysis Requirements

Groundwater monitoring shall be as per the HMSP dated June 14, 2018 (Doc #92593) approved June 25, 2018.

The HMSP includes no-flow sampling methods as detailed in the HMSP.

Groundwater analysis will be for Appendix I/Appendix II compounds as defined in IAC 567, Chapter 113.10(5)"a" and 113.10(6)"b".

Statistical Analysis is performed using the DUMPSTAT statistical program. Intrawell statistical methods are included in the approved HMSP.

113.10(5) Detection Monitoring Program

MW-10A, MW-10B, MW-18, MW20, MW-22, MW-25, MW-28, MW-29, MW-30, MW-31, MW-32, GU-2, GU-3, GU-4, GU-5, and GU-6 are the monitoring points on site that are in detection monitoring (sampled for Appendix I).

113.10(6) Assessment Monitoring Program

Monitoring well MW-21R is included in the assessment monitoring program based on inorganic compound detections.

113.10(7) Assessment of Corrective Measures

Not applicable.

113.10(8) Selection of Remedy

Not applicable.

113.10(9) Implementation of the Corrective Action Plan

Not applicable.

113.10(10) Annual Water Quality Reports

Annual Water Quality Reports (AWQR) will be submitted by February 28 of each year. Semi-Annual Water Quality Notifications will be filed by July 31 of each year in accordance with the unnumbered Permit Amendment dated May 22, 2013 (Doc#77133).

SECTION G

Project Goals and Timelines for RD&D Permits

RESEARCH, DEVELOPMENT AND DEMONSTRATION PERMITS

The NCIRSWA Sanitary Landfill 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

July 22, 2025

COLE BOCKELMANN
CHAIR
NORTH CENTRAL IOWA REGIONAL SOLID WASTE AGENCY
PO BOX 578
FORT DODGE IA 50501

Re: North Central Iowa Regional Sanitary Landfill
Permit Number 94-SDP-01-75P
Approval of Financial Assurance

Dear Mr. Bockelmann:

This is notification by the Iowa Department of Natural Resources (DNR) that the North Central Iowa Regional Solid Waste Agency (Agency) has adequately complied with the financial assurance requirements of 567 IAC 113.14(455B) for the North Central Iowa Regional Sanitary Landfill. The Agency's financial assurance documentation (Doc #113468), received July 17, 2025, has been placed in the DNR's record files.

The projected deposit of **$228,904** to the Agency's Closure/Post-closure Local Government Dedicated Fund (LGDF) needs to be made by July 30, 2025. That deposit amount is as stated in the "Formula for Projected Deposits" component of Section 7 of the Association's Financial Assurance Report Form.

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

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

Sincerely,

Mary Klemesrud
Program Planner
Land Quality Bureau

Cc: Doug Luzbetak, P.E., HLW Engineering Group
Iowa DNR Field Office #2, Mason City

SECTION I

Closure and Postclosure Plan

CLOSURE AND POSTCLOSURE PLAN

113.12 CLOSURE CRITERIA

NOTE THAT THIS CLOSURE AND POSTCLOSURE PLAN DOES NOT CONTAIN A DISCUSSION REGARDING REVISIONS DUE TO THE LANDFILL SLOPE REMEDIATION PROJECT (CURRENTLY UNDER CONSTRUCTION). AS PER THE SDP PERMIT, AMENDMENTS TO THE CLOSURE AND POSTCLOSURE PLAN WILL BE REQUIRED UPON COMPLETION OF THE PROJECT.

113.12(1) Final Cover System

All unlined landfilling areas at the NCIRSWA SLF have been closed. The unlined areas have been closed with:

- a two foot soil cap (areas that stopped receiving waste prior to October 25, 1989)
- a four foot soil cap
- a Subtitle D composite abutment liner

Closure documentation for the unlined landfilling areas is discussed below.

Areas closed before October 25, 1989 (2 foot soil cap)
In accordance with the regulations in effect at the time of closure, areas that stopped receiving waste prior to October 25, 1989 were required to be closed with a 2' soil cap. The area requiring closure with a 2' soil cap is shown on Figure 3 in Appendix 1 of Section D of this Submittal. Documentation on the closure of this area was submitted in the Quality Control and Assurance Report, Closed Unlined Areas, *Areas That Stopped Receiving Waste Prior to October 25, 1989* dated November 10, 2014 (Doc #81776). This report was approved in Permit Amendment #11 dated December 2, 2014.

Areas closed after October 25, 1989 (4 foot soil cap)
Unlined landfilling areas that received solid waste after October 25, 1989 require closure with a 4' soil cap consisting of a minimum 2' thick infiltration layer with hydraulic conductivity no greater than $1x10^{-7}$cm/sec overlain by a minimum 2' thick erosive layer. The area requiring closure with a 4' soil cap is shown on Figure 3 in Appendix 1 of Section D of this Submittal. Documentation on the closure of this area was submitted in the Quality Control and Assurance Report, Closed Unlined Areas, *Areas That Stopped Receiving Waste After October 25, 1989* dated November 22, 2016 (Doc #87752). This report was approved via email on November 28, 2016 (Doc #87825). Note that a portion of the area requiring closure with a 4' soil cap was "closed" with the Subtitle D composite liner constructed during the Abutment Liner/SW Area Closure project in 2016.

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. Terraces will be constructed on the cap as needed to control erosion and aid in the establishment of vegetation on the cap. The terrace design will be completed at the time of closure.

The active disposal areas in the Subtitle D compliant horizontal expansion area have been constructed with alternative liners meeting EPA Subtitle D requirements (2002 Plan Fill Area and SE Lateral Expansion 2008 Area) and composite liners meeting EPA Subtitle D requirements (Phase 1, Phase 2, Phase 3, and Abutment Liner Area). The closure of the Subtitle D alternative lined cells is detailed in the discussion under 113.12(2).

Disposal areas at the NCIRSWA SLF constructed with a composite liner meeting EPA Subtitle D requirements 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 on site that can meet the $1x10^{-7}$cm/sec hydraulic conductivity requirements. Additional soil samples are routinely tested for hydraulic conductivity as the waste disposal and borrow 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 hauled to the 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.

Typical details for the composite cap are included on Figures 14R and 16R in Appendix 1 of Section D of this Submittal. A detail showing the "joint" between the composite and alternative caps is included on Figure 15R in Appendix 1 of Section D of this Submittal.

113.12(2) Alternative Final Cover System

Disposal areas having a Subtitle D compliant alternative liner will be closed with a four foot soil cap. The closure of the Subtitle D compliant alternative lined areas shall be in accordance with the "Certification of Alternative Landfill Liner System" dated November 16, 1998 (Doc #61248). Portions of the Alternative Lined area have been closed to date. The areas that have been closed to date are shown on Figure 3 in Appendix 1 of Section D of this Submittal. Documentation on the closure of portions of the alternative lined areas completed to date has been included in the following reports:

- Quality Control and Assurance Report, Phase 1 Expansion/2014 Closure – Division 3 dated November 10, 2014 (Doc #81767). The documentation was approved in Permit Amendment #10 dated November 26, 2014.

- Quality Control and Assurance Report, Abutment Liner/SW Area Closure dated June 26, 2016 (Doc #86652). The documentation was approved in the SDP Permit Revision dated June 29, 2016.

The closure cap of the Subtitle D compliant alternative lined areas shall consist of:

a. An infiltration layer of not less than two feet of compacted soil. The hydraulic conductivity will be no greater than $1x10^{-7}$cm/sec as determined by appropriate

laboratory analysis. 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 obtained from the infiltration layer. The testing requirements will be further detailed in the 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 on site that can meet the $1x10^{-7}$cm/sec hydraulic conductivity requirements. Additional soil samples are routinely tested for hydraulic conductivity as the waste disposal and borrow 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 hauled to the site.

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

A typical detail for the alternative cap is included on Figure 13 in Appendix 1 of Section D of this Submittal. A detail showing the "joint" between the composite and alternative caps is included on Figure 15R in Appendix 1 of Section D of this Submittal.

113.12(3) Written Closure Plan

This document is the written closure plan. The individual components of 113.12(3) are addressed below:

a) Descriptions of the final cover systems are contained in the discussion in subrules 113.12(1) and 113.12(2) above.

b) Due to the method of cell development and landfilling at the NCIRSWA SLF, additional waste will be added to previously constructed disposal areas when a new disposal area is constructed. Portions of the alternative lined areas have been closed – the areas that have been closed to date are shown on Figure 3 in

Appendix 1 of Section D of this Submittal. Due to the method of development, it is anticipated that the remainder of the Subtitle D compliant alternative lined areas, Phase 1, Phase 2, Phase 3, and the Abutment Liner Area will be closed in multiple phases as further development on site occurs. Note that it is very difficult to predict future closure activities due to likely changes in waste stream volume, method of operation, recycling activities, cell construction, partial closures, etc.

c) It is estimated that, if development of the alternative lined areas, Phase 1, Phase 2, Phase 3, and the Abutment Liner Area occurs as outlined in the permit renewal documentation, approximately 3.6 million tons of waste will be deposited in the existing disposal areas on site when the disposal areas reach maximum elevations. Note that this estimate does not include any future disposal areas outside of the current approved disposal area. The estimate of maximum inventory of waste presented above should in no way be interpreted or used to limit future waste deposition in either the approved disposal areas or in future waste disposal areas.

d) Closure of portions of the Subtitle D compliant alternative lined area have been completed. Areas closed to date are shown on Figure 3 in Appendix 1 of Section D of this Submittal. No further closure is anticipated during the current permit cycle. Note that it is very difficult to predict future closure activities due to likely changes in waste stream volume, method of operation, recycling activities, cell construction, partial closures, etc. If the additional development proposed north and west of the existing fill areas occurs, final closure of the facility is not anticipated for well over 50 years.

113.12(4) Placing Closure Plan in Operating Record

Upon approval by IDNR, this Closure and Postclosure Plan will be placed in the Operating Record of the NCIRSWA SLF.

113.12(5) Department Notification

At least 180 days prior to beginning closure of the landfill, the IDNR will be notified of the intent to close the landfill and a notice of intent to close will be placed in the operating record. If the facility will no longer be accepting MSW for disposal, then the NCIRSWA SLF will also notify all local governments utilizing the facility and post a public notice of the intent to close and no longer accept MSW.

113.12(6) Commencement of Closure Activities

Closure activities will typically commence within 30 days after the date on which the landfill receives the final waste. Extensions may be granted by IDNR as per subrule 113.12(6)”b”.

113.12(7) Completion of Closure Activities

The NCIRSWA will complete closure activities in accordance with the closure plan within 180 days following the beginning of closure. Extensions of the closure period may be granted by the IDNR if the owner or operator demonstrates that closure will, of necessity, take longer than 180 days and that the owner or operator has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed MSWLF unit.

113.12(8) Certification of Closure

Following closure, a professional engineer registered in Iowa will submit a certification to IDNR verifying that closure activities have been completed in general accordance with the Closure/Postclosure Plan.

113.12(9) Notation on Deed

Following closure, a notation will be filed on the property deed to notify any potential purchaser of the property that the land was used as a landfill facility.

113.12(10) Removal of Notation on Deed

If all wastes are removed from the facility, the NCIRSWA may request permission from IDNR to remove the notification discussed in 113.12(9) above.

113.13 POSTCLOSURE CARE REQUIREMENTS

113.13(1) Postclosure Care

Following closure of the facility, the NCIRSWA will conduct postclosure care for 30 years (except as provided in subrule 113.13(2) below). The postclosure care will consist of at least the following:

a) The integrity and effectiveness of the final cover will be maintained by making repairs as necessary to correct the effects of settling, subsidence, erosion, or other events and preventing run-on and runoff from eroding or damaging final cover. If damage to the infiltration layer and/or erosion layer occurs, repairs shall be made to correct the damage in accordance with original specifications. The vegetative cover shall be reseeded as necessary to maintain good vegetative growth. Any invading vegetation whose root system could damage the final cover should be removed or destroyed. Noxious weeds will be controlled.

b) The leachate collection system will be managed and operated in accordance with the requirements in subrules 113.7(5)”b” and 113.8(3)”i”. The IDNR may allow

the NCIRSWA to stop managing leachate if the NCIRSWA demonstrates that leachate no longer poses a threat to human health and the environment.

c) The NCIRSWA will maintain and monitor the groundwater monitoring system in accordance with subrule 113.10 and as detailed in the Hydrologic Monitoring System Plan throughout the postclosure period.

d) The NCIRSWA will maintain and monitor the gas monitoring system in accordance with subrule 113.9 and as detailed in the Gas Monitoring System Plan throughout the postclosure period.

113.13(2) Length of Postclosure Care Period

As per rule 113.13(1), the length of the postclosure care period is 30 years. The length of the postclosure care period may be either:

a) Decreased by the IDNR if the NCIRSWA demonstrates that the reduced period is sufficient to protect human health and the environment.

b) Increased by the IDNR if the IDNR determines that the lengthened period is necessary to protect human health and the environment.

113.13(3) Written Postclosure Plan

This written postclosure plan includes the following:

a) A description of the monitoring and maintenance activities required is contained in subrule 113.13(1) above. The frequency of monitoring and maintenance activities will be in accordance with the regulations in effect at the time of closure.

b) The following will be the contact during the postclosure period:

Mark Campbell, Chief Operating Officer
North Central Iowa Regional Solid Waste Agency
2151 Gypsum Hollow Road, PPO Box 578
Fort Dodge, Iowa 50501
Phone: (515)955-2781
email: mark@ncirswa.org

The IDNR will be notified if the contact person changes prior to or during the postclosure period.

c) The ultimate land use of this property will be open green space, with steps taken to protect the final cap, including vegetation monitoring, erosion control, and the removal of woody vegetation as necessary. Future uses of the property, if any, will be compatible with the ultimate protection of the landfill cap and any monitoring structures.

113.13(4) Placing Postclosure Plan in Operating Record

Upon approval by IDNR, this Closure and Postclosure Plan will be placed in the Operating Record of the NCIRSWA SLF.

113.13(5) Certification of Completion of Postclosure

Following completion of the postclosure care period, a professional engineer registered in Iowa will submit a certification to IDNR verifying that postclosure care has been completed in general accordance with the Closure/Postclosure Plan.

SECTION J

Comprehensive Plan Approval

Gmail Todd Whipple <twhipple@hlwengineering.com>

NCIRSWA Rnd9 Apprvl Comp Plan Update

1 message

Rasmus, Laurie <laurie.rasmus@dnr.iowa.gov> Thu, May 22, 2025 at 4:57 PM
To: Mark Campbell <mark@ncirswa.org>, Jason Potts <pottsy@ncirswa.org>, Todd Whipple <twhipple@hlwengineering.com>
Cc: Jennifer Wright <jennifer.wright@dnr.iowa.gov>, "Jolly, Becky" <becky.jolly@dnr.iowa.gov>, Trent Lambert <trent.lambert@dnr.iowa.gov>, Brian Rath <brian.rath@dnr.iowa.gov>, Paige Alesch <palesch@region12cog.org>, Shelene Codner <shelly@netins.net>

IOWA DNR
IOWA DEPARTMENT OF NATURAL RESOURCES

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

NORTH CENTRAL IOWA REGIONAL SOLID WASTE AGENCY
9th 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 44.93% for Fiscal Year 2024. 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 above 36% but below 50% diversion. The fee structure is outlined in the Tonnage Fee Distribution Fact Sheet. Questions regarding tonnage fee submission may be directed to Becky Jolly at 515-249-1482 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. Waste reduction, pollution prevention and financial assistance are all areas of emphasis. In addition, the voluntary Environmental Management System (EMS) program provides benefits for efforts 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

FY2024 GP_NCIRSWA_2-19-2024.pdf
258K

Plan Update_NCIRSWA_recvd 4-16-25.pdf
4973K

Rnd9Cklst1_NCIRSWA.pdf
174K

BASE-YEAR ADJUSTMENT METHOD REPORT TABLE

NAME OF PLANNING AREA: North Central Iowa Regional Solid Waste Agency

CURRENT YEAR (CY): FY2024_completed Feb. 19, 2025
BASE YEAR: FY1988

FACTORS	DATA	TIME-PERIOD / SOURCE
STEP 1: Basic Information		
1 Base Year Residential Waste Disposal	49,690.04	A
2 Base Year Commercial/Industrial Waste Disposal	100,885.84	B
3 Base Year Total Waste Disposal	150,575.88	
4 CY Waste Disposal	83,172.67	G
5 Base Year Population	70,053	C
6 CY Population	68,709	H
7 Base Year Employment	30,814.58	D
8 CY Employment	29,611.77	I
9 Base Year Taxable Sales	$720,400,074	E
10 CY Taxable Sales	$993,045,390	J
11 Base Year Consumer Price Index	236.6770	F (PA weighted by E)
12 CY Consumer Price Index	309.5705	K
STEP 2: CY Taxable Sales Corrected for Inflation		
13 Inflation Correction Factor	0.7645334	F/K
14 CY Corrected Taxable Sales	$759,216,410	J*(F/K)
STEP 3: Base Year and Current Year Ratios		
15 Population Ratio (PR)	0.9808145	H/C
16 Employment Ratio (ER)	0.9609663	I/D
17 Taxable Sales Ratio (TR)	1.0538816	(J*F/K)/E
STEP 4: Adjustment Factors		
18 Base Year Commercial/Industrial Adjustment Factor	1.0074240	Average of Lines 16 & 17
19 Base Year Residential Adjustment Factor	0.9941193	Average of Lines 15 & 18
STEP 5: Adjusted Base Year Disposal Tonnages		
20 Base Year Adjusted Residential Waste Disposal	49,398	A * Line 19
21 Base Year Adjusted Commercial/Industrial Waste Disposal	101,635	B * Line 18
22 Base Year Adjusted Total Waste Disposal	151,033	
STEP 6: Goal Progress and Reduction Percentage Results		
23 CY Waste Disposal (from line #4)	83,173	G
24 Maximum Allowable Disposal to Attain 25 Percent Goal	113,274	Line 22*0.75
25 Actual Tonnage Over (or Under) 25 Percent Goal	-30,102	Line 23 minus Line 24
26 Maximum Allowable Disposal to Attain 50 Percent Goal	75,516	Line 22*0.5
27 Actual Tonnage Over (or Under) 50 Percent Goal	7,656	Line 23 minus Line 26
28 CURRENT DISPOSAL REDUCTION (PERCENTAGE)	**44.93%**	**(Line 22 minus Line 23) /Line 22**

Planning Area (PA)	County	City	2022 Pop.	PA Pop. (H)	Pop. % in PA	FY2024 Non-farm Jobs in County (MSA calc 2022 Census)	Non-Farm Jobs in PA (I)	2024 Taxable Sales
CISWMA	Calhoun	Farnhamville	370					
WCISWMA	Calhoun	Jolley	28					
NCIRSWA	Calhoun	Knierim	54	54				
WCISWMA	Calhoun	Lake City	1,681					
CISWMA	Calhoun	Lohrville	367					
NCIRSWA	Calhoun	Manson	1,657	1,657				$21,875,609
NCIRSWA	Calhoun	Pomeroy	513	513				$3,746,002
WCISWMA	Calhoun	Rinard	31					
NCIRSWA	Calhoun	Rockwell City	2,205	2,205				$24,342,819
CISWMA	Calhoun	Somers	121					
WCISWMA	Calhoun	Yetter	20					
WCISWMA	Calhoun	zz.Uninc area	2,678					
			9,725	**4,429**	**45.5%**	**2,876**	**1,310**	**$49,964,431**
NCIRSWA	Hamilton	Blairsburg	173	173				$913,192
NCIRSWA	Hamilton	Ellsworth	495	495				$14,891,140
NCIRSWA	Hamilton	Jewell Junction	1,187	1,187				
NCIRSWA	Hamilton	Kamrar	181	181				$1,602,898
NCIRSWA	Hamilton	Randall	155	155				
NCIRSWA	Hamilton	Stanhope	355	355				$1,910,643
NCIRSWA	Hamilton	Stratford	691	691				$4,199,585
NCIRSWA	Hamilton	Webster City	7,750	7,750				$100,831,586
NCIRSWA	Hamilton	Williams	301	301				$6,275,897
NCIRSWA	Hamilton	zz.Uninc area	3,532	3,532				$8,331,537
			14,820	**14,820**	**100.0%**	**5,521**	**5,521**	**$138,956,477**
N Plains	Humboldt	Bode	303					
NCIRSWA	Humboldt	Bradgate	74	74				
NCIRSWA	Humboldt	Dakota City	758	758				$3,386,315
NCIRSWA	Humboldt	Gilmore City	481	481				$5,001,044
NCIRSWA	Humboldt	Hardy	54	54				
NCIRSWA	Humboldt	Humboldt	4,782	4,782				$81,943,252
NCIRSWA	Humboldt	Livermore	377	377				$1,401,551
NCIRSWA	Humboldt	Ottosen	40	40				
NCIRSWA	Humboldt	Pioneer	-	-				
NCIRSWA	Humboldt	Renwick	228	228				$2,140,746
NCIRSWA	Humboldt	Rutland	116	116				
NCIRSWA	Humboldt	Thor	179	179				
NCIRSWA	Humboldt	zz.Uninc area	2,180	2,180				$9,727,469
			9,572	**9,269**	**96.8%**	**3,732**	**3,614**	**$103,600,377**
NCIRSWA	Webster	Badger	535	535				$1,403,172
NCIRSWA	Webster	Barnum	174	174				
NCIRSWA	Webster	Callender	361	361				
NCIRSWA	Webster	Clare	132	132				$846,860
NCIRSWA	Webster	Dayton	758	758				$7,027,761
NCIRSWA	Webster	Duncombe	374	374				
NCIRSWA	Webster	Fort Dodge	24,657	24,657				$624,906,034
NCIRSWA	Webster	Gowrie	939	939				$9,335,271
NCIRSWA	Webster	Harcourt	256	256				$5,800,677
NCIRSWA	Webster	Lehigh	393	393				$2,277,373
NCIRSWA	Webster	Moorland	170	170				
NCIRSWA	Webster	Otho	418	418				$1,067,469
NCIRSWA	Webster	Vincent	127	127				
NCIRSWA	Webster	zz.Uninc area	7,332	7,332				$2,392,650
			36,626	**36,626**	**100.0%**	**17,676**	**17,676**	**$655,057,267**

LNI	Wright	Belmond	2,404					
LNI	Wright	Clarion	2,749					
LNI	Wright	Dows	514					
NCIRSWA	Wright	Eagle Grove	3,565	3,565				$45,466,837
LNI	Wright	Galt	23					
LNI	Wright	Goldfield	617					
LNI	Wright	Rowan	118					
LNI	Wright	Woolstock	140					
LNI	Wright	zz.Uninc area	2,551					
			12,681	**3,565**	**28.1%**	**5,304**	**1,491**	**$45,466,837**

NCISRSWA	**Total**	**Total**		**68,709**			**29,612**	**$993,045,390**
				H			**I**	**J**

PA	Permit #	Facility	Tons, Non Exempt	Released (non HF399) ton another IA PA (+)	From another IA PA (non HF 399) (-)	Generated Out of Iowa (-)	Diposed out of Iowa (+)	Exceptional Event (-)	FY2024 PA Tons (G)
NCIRSWA	94-SDP-01-75	North Central Iowa Regional Sanitary Landfill	83,173	0	0	0	0	0	**83,173**
NCIRSWA									**83,173**
CPI FY2024	309.5705								

NICIRSWA	All cities and the unincorporated area in Webster County; all cities and the unincorporated area in Hamilton County; all cities and the unincorporated area in Humboldt County excluding the city of Bode; the City of Eagle Grove in Wright County; and the Cities of Rockwell City, Knierim, Pomeroy, and Manson and the North Central Correctional Facility in Calhoun County. (Last Updated: 3/13/2015)