IOWA DEPARTMENT OF NATURAL RESOURCES

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

December 8, 2025

CLINT REENTS
RURAL IOWA WASTE MANAGEMENT ASSOCIATION
20488 M AVE
ELDORA, IA 50627

RE: Rural Iowa Sanitary Landfill
Permit No. 42-SDP-01-72P
Permission to Stockpile Wood Chips (Document No. 114774)
Revised Permit – Amendment No. 4

Dear Mr. Reents:

Enclosed is the revised permit for the Rural Iowa Sanitary Landfill. The permit and the approved plans must be kept at the sanitary disposal project in accordance with Iowa Administrative Code 567 Paragraph 113.11(1)"a" (567 IAC 113.11(1)"a"). Please review the permit in its entirety with your operators, as they must become familiar with it.

The revised permit approves the landfill to store and use wood chips in request dated November 19, 2025, as submitted by HLW Engineering Group. The revised permit also adds a provision to the closed area section of the permit regarding the process to reduce or end postclosure care.

Note that the permit may contain conditions that require a response or action by you, which if not properly complied with, may prompt enforcement action by the IDNR.

If you have any questions, you may contact me at (515) 229-8356 or mailto:mike.smith@dnr.iowa.gov.

Sincerely,

Michael W. Smith
Digitally signed by Michael W. Smith
Date: 2025.12.08 11:49:36 -06'00'

Michael Smith, P.E.
Environmental Engineer Senior
Land Quality Bureau

Enclosure

copy: Doug Luzbetak, PE
HLW Engineering Group
204 West Broad Street
P.O. Box 314
Story City, IA 50248

DNR Field Office #2

IOWA DEPARTMENT OF NATURAL RESOURCES
SANITARY DISPOSAL PROJECT PERMIT

I. **Permit Number:** 42-SDP-01-72P

II. **Permitted Agency:** Rural Iowa Waste Management Association

III. **Project Location:**

Open Area: W 1/2 of the NE 1/4, Section 25, T88N, R21W, Hardin County

Closed Area: S 1/2 of the NW 1/4, Section 25, T88N, R21W, Hardin County

IV. **Responsible Official**

Name:	Rusty Eddy, Chair
Address:	Rural Iowa Waste Management Association 20488 M Avenue Eldora, Iowa 50627
Phone:	641-858-5904
Email:	rusty.eddy1969@gmail.com

V. **Licensed Design Engineer**

Name:	Douglas J. Luzbetak, P.E.
Address:	HLW Engineering Group 204 West Broad Street P.O. Box 314 Story City, Iowa 50248
Phone:	515-733-4144
Email:	dluzbetak@hlwengineering.com
Iowa License Number:	12654

VI. **Date Permit Issued:** **November 29, 2022**
Date Permit Revised **December 8, 2025** **Amendment #4**

VII. **Permit Expiration Date:** **November 29, 2027**

VIII. **Issued by:** Michael W. Smith Digitally signed by Michael W. Smith Date: 2025.12.08 11:46:31 -06'00'

Iowa Department of Natural Resources

IX. **General Provisions**

The above-named permitted agency is hereby authorized to operate a sanitary disposal project at the described location in conformance with Iowa Code section 455B, the rules pursuant thereto existing at the time of issuance, and any subsequent new rules which may be duly adopted, and any provisions contained in Section X of this permit.

The issuance of this permit in no way relieves the applicant of the responsibility for complying with all other local, state, and federal statutes, ordinances, rules, or other requirements applicable to the establishment and operation of this sanitary disposal project.

No legal or financial responsibility arising from the construction or operation of the approved project shall attach to the State of Iowa or the Department of Natural Resources (DNR) due to the issuance of this permit.

If title to this project is transferred, the new owner must apply to the DNR for a transfer of this permit within thirty days of the date of title transfer pursuant to subrule 113.4(3). This permit is void sixty days after the date of title transfer unless the DNR has transferred the permit.

The permit holder shall file a Quarterly Solid Waste Fee Schedule and Retained Fee Report utilizing the DNR's Form 542-3276 and remit tonnage fee payment, as applicable, for all wastes disposed at the sanitary disposal project in accordance with Iowa Code section 455B.310. The Reports will be due January 1, April 1, July 1, and October 1 for the quarters ending September 30, December 31, March 31, and June 30, respectively. The permit holder shall mail the completed report to the Solid Waste Section, Wallace State Office Building, 502 East Ninth Street, Des Moines, Iowa 50319. This reporting procedure supersedes any previous conflicting permit provisions.

The permit holder shall weigh all solid waste collection vehicles and solid waste transport vehicles on a scale certified by the Iowa Department of Agriculture and Land Stewardship. If conditions are such that make it impractical to provide an on-site scale, then off-site scale facilities may be used if justified and approved by the DNR. The permit holder shall comply with the waste weighing, record keeping, and tonnage fee reporting requirements defined in rule 101.14(455B,455D). The scale weighing facilities shall comply with the certification and licensing requirements of the Iowa Department of Agriculture and Land Stewardship at all times. The permit holder shall maintain a current copy of the weighing scale facility licensing certificate issued by the Iowa Department of Agriculture and Land Stewardship at all times.

The permit holder shall ensure that the sanitary disposal project does not (1) cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to Section 402 of the Clean Water Act, and (2) cause the discharge of a nonpoint source of pollution into waters of the United States, including wetlands, that violates any requirement of an areawide or statewide water quality management plan that has been approved under Section 208 or 319 of the Clean Water Act.

The permit holder shall submit an updated Municipal Solid Waste Sanitary Landfill Financial Assurance Report Form no later than April 1st, annually, pursuant to rule 113.14(455B). Use of this form provides permit holders a uniform means of submitting all required documentation to ensure that closure and postclosure cost estimates and applicable financial assurance instruments are updated as required.

Failure to comply with Iowa Code section 455B or any rule or order promulgated pursuant thereto, or any provisions of this permit may result in 1) a civil penalty of up to $5000 for each day of violation, pursuant to Iowa Code section 455B.307, or 2) the suspension or revocation of this permit, pursuant to Iowa Code section 455B.305.

X. Special Provisions– Open Area

1. The permit holder is authorized to accept solid waste for disposal in accordance with the approved Rural Iowa Waste Management Association Comprehensive Plan. The Comprehensive Plan as approved by the DNR on February 27, 2025; any approved amendments to the plan; and the latest plan update, are hereby incorporated as permit plan documents.

   The permitted service area includes: All cities and the unincorporated area in Butler County; all cities (excluding Whitten) and the unincorporated area in Hardin County; the City of Ackley in Franklin County; and the cities of Beaman, Conrad, Holland, and Wellsburg and the unincorporated areas in Grundy County.

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

2. The permit holder shall develop and operate the site in accordance with the Development and Operations Plan, as included in Section E of the 2022 Municipal Solid Waste Landfill Permit Renewal, dated August 22, 2022, as submitted by HLW Engineering Group (HLW); and the following:

   a. Waste disposal is limited to Trenches 1 and 2, including Phases A, B, C, 1, and 2; and Trench 3. The site's vertical height shall not exceed a maximum waste elevation of 1180 feet in Trench 1; 1190 feet in Trench 2; and 1170 feet in Trench 3.

   b. Any further expansion beyond Trenches 1, 2, and 3 shall require prior Department approval.

   c. In accordance with the variance, dated December 4, 2017, the permit holder is authorized to directly incorporate nonhazardous petroleum contaminated soils (PCS) into the landfill active area without pre-treatment, as required by IAC 567-109.11(2)d through IAC 567-109.11(2)I.

d. In accordance with the comment letter from the Federal Aviation Administration (FAA), dated May 22, 2007, the permit holder shall operate the site in a manner compatible with the Iowa Falls Municipal Airport as follows:

   1) The facility must be properly supervised to assure that bird populations are not increasing and that appropriate control procedures are being followed.
   2) Any increases in bird activity that might be hazardous to safe aircraft operations will result in prompt mitigation actions and/or closure of the facility.

e. The review comments, dated August 16, 1995, from the Department's Conservation and Recreation Division relative to the comprehensive listing of plant and animal species for the development and soil borrow areas included in the review, are incorporated as part of the permit documents.

f. The review comments; dated October 31, 1995, from the State Historical Society relative to the determination of the presence of an assessment of the impact on any archaeological, historical, or architecturally significant properties for the development and soil borrow areas included in the review; are incorporated as part of the permit documents.

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

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

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

h. The following shall be recorded by the permit holder and reported in the LCSPER for each leachate thickness measurement that equals or exceeds 12 inches:
   1) Date of original and any verification measurement.

2) If a 12-inch or greater leachate column is verified, specific actions taken by the certified operator to lower leachate thickness or an explanation of why specific actions were not necessary.
3) Date and results of follow-up measurement.
4) Repeat steps 2 and 3 as necessary until a compliant measurement is collected.

i. The permit holder shall follow the approved Emergency Response and Remedial Action Plan (ERRAP) procedures during all emergencies pursuant to subrule 113.8(5). An updated ERRAP shall be submitted at the time of each permit renewal application. An updated ERRAP shall be included with any request for a permit modification to incorporate a facility expansion or significant changes in facility operation that require modification of the currently approved ERRAP.

j. The Construction Certification and Plans for the leachate control system, dated September 20, 1996, as submitted by FOX Engineering Associates, Inc. and approved on November 22, 1996, are incorporated as part of the permit documents.

k. The Leachate Control and Closure Project Plans and Specifications, dated June 30, 1995, as submitted by Fox, and approved on October 25, 1995, that supplement and modify the previously approved Leachate Control Plan documents, are incorporated as part of the permit documents.

l. The Iowa Professional Engineer Certification of Alternative Landfill Liner System dated September 14, 2000, as prepared by FOX Engineering Associates, Inc. and approved on October 6, 2000, satisfies the requirements of subparagraph 113.7(5)“a”(2). The approved alternative liner system for this facility applies to Phases A, B, and C of Trenches 1 and 2. This liner consists of a four-foot compacted soil liner with a coefficient of permeability of $1x10^{-7}$ cm/sec or less. Note that a 0.25” thick drainage net is required as part of the cap.

m. The Transmittal and Sheet 1, relative to the terrace on the south side of the vertical expansion, the fuel storage building northeast of Trench 1, and the C&D salvage area, dated July 25, 2002, as submitted by FOX Engineering Associates, Inc. and approved on May 6, 2003, are incorporated as part of the permit documents.

n. The Construction Certification Report for the Trench 1 Expansion (Phase A), dated June 10, 2002; and the Construction Certification Report for the Trench 2 Expansion (Phase A), dated September 18, 2002, both as submitted by FOX Engineering Associates, Inc. and approved on May 6, 2003, are incorporated as part of the permit documents

Each trench construction consists of a 4-foot compacted clay liner, a leachate collection piping system, and a groundwater diversion system.

o. The Record Drawing for the Trench 1 and Trench 2 Expansion (Phase A) including the leachate head monitoring points, dated November 15, 2002, as submitted by FOX Engineering Associates, Inc. and approved on May 6, 2003, is incorporated as part of the permit documents.

p. The Construction Certification Report for the Trench 1 Expansion (Phase B), dated October 7, 2003, as submitted by FOX Engineering Associates, Inc. and approved on December 12, 2003, is incorporated as part of the permit documents.

q. The Record Drawing for the Trench 1 Expansion (Phase B) dated January 5, 2004, as submitted by FOX Engineering Associates, Inc. and approved on June 14, 2004, is incorporated as part of the permit documents.

r. The Plan Sheet 1, dated January 4, 2005, and approved January 18, 2005, showing the location of the sediment basin in the horizontal expansion/borrow area; and the design information for the sediment basin, dated June 28, 2005, and approved August 18, 2005; both as submitted by FOX Engineering Associates, Inc., are incorporated as part of the permit documents.

s. The Construction Certification Report for the Trench 1 Expansion (Phase C), dated June 22, 2005, as submitted by FOX Engineering Associates, Inc. and approved on August 18, 2005, is incorporated as part of the permit documents.

t. The Construction Certification Report for the Trench 2 Expansion (Phase C), dated October 14, 2005, as submitted by FOX Engineering Associates, Inc. and approved on December 28, 2005, is incorporated as part of the permit documents.

u. The Record Drawings for the Trench 1 and Trench 2 Expansion (Phase C), dated November 28, 2005, as submitted by FOX Engineering Associates, Inc. and approved on December 28, 2005, is incorporated as part of the permit documents.

v. The Quality Assurance/Quality Control Report for the Trench 1 & 2 Horizontal Expansion (Phase 1), dated November 17, 2008; the As Built Drawings, Phase 1, Trench 1 and 2 Horizontal Expansion, dated November 19, 2008; and the Trench 1 and 2 Horizontal Expansion (Phase 1) additional information dated December 1, 2008; all as submitted by FOX Engineering Associates, Inc., and approved on December 4, 2008; are incorporated as part of the permit documents.

w. The Trench 1 and 2 Horizontal Expansion (Phase 2) Quality Assurance/Quality Control Report and As Built Drawings, dated July 21, 2009, as submitted by Fox Engineering Associates, Inc., and approved on July 29, 2009, is incorporated as part of the permit documents.

x. The Site Exploration and Characterization Report, included as Section C of the Permit Renewal application dated January 11, 2011, as submitted by HLW Engineering Group, as approved on February 3, 2012, is incorporated as part of the permit documents.

y. The Quality Control and Assurance Report for the Trench 3 Expansion, dated September 24, 2015, as submitted by HLW and approved on October 23, 2015, is incorporated as part of the permit documents.

z. The request to construct Trench 3 Phase 2 Expansion, dated August 28, 2023, as submitted by HLW Engineering Group, was approved on October 23, 2023 via e-mail.

3. Hydrologic monitoring at the site shall be conducted in accordance with the Environmental Monitoring Plan, as included in Section F of the 2022 Municipal Solid Waste Landfill Permit Renewal dated August 22, 2022, as submitted by HLW; and the following:

   a. The HMSP shall include background groundwater monitoring points MW-36, MW-37, MW-39, MW-40, and MW-47; and downgradient monitoring points MW-48A, MW-49A, MW-50, MW-51, GU-1, GU-2, and GU-3.

   b. Groundwater monitoring points not used for water quality analysis may be retained as water level measuring points.

   c. Plume delineation monitoring points utilized in accordance with numbered subparagraph 113.10(6)g(1)1 to delineate existing groundwater contaminant plumes, must be sampled at a semiannual sampling frequency for those constituents where a statistically significant exceedance of a Groundwater Protection Standard was determined at the corresponding point-of-compliance well(s), and Total Suspended Solids (TSS), or approved turbidity correlation.

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

      The documentation forms for the abandonment of temporary monitoring points MW14-1, MW14-2, and MW14-3, dated December 6, 1995, are incorporated as part of the permit documents.

      The documentation forms for the abandonment of monitoring points MW-31, MW-31B, MW-31C, MW-32, and PZ-12, dated May 27, 1996, are incorporated as part of the permit documents.

      The documentation forms for the abandonment of temporary monitoring points MW9-1, MW9-2, and MW9-3, dated December 8, 1998, are incorporated as part of the permit documents.

      The documentation form for the abandonment of monitoring point MW-11, dated April 21, 2000, is incorporated as part of the permit documents.

      The documentation forms for the abandonment of monitoring points MW-48 and MW-49; and the boring logs and well construction documentation forms for replacement wells MW-48A and MW-49A, as attached to the March 22, 2005 correspondence from FOX Engineering Associates, Inc.; are hereby incorporated as part of the permit documents.

      The Boring Logs & Monitoring Well Construction Documentation Forms, dated January 10, 2011, as submitted by HLW Engineering Group, are hereby approved and incorporated as part of the permit documents. The monitoring points included in this

documentation were monitoring wells MW-13R, MW-50, and MW-51 and gas probes GP-3 through GP-7.

The Boring Logs and Monitoring Well Construction Documentation Forms for replacement monitoring well MW-31R and leachate piezometers LPZ-201 and LPZ-202, as approved on August 9, 2012, are approved and incorporated into the permit documents.

e. The *MW-7 Area Study - Field Characterization Delineation of Plume (*DocDNA#77234), dated June 7, 2013; and the *Response to February 26, 2014, Comment Letter,* dated April 30, 2014; both as submitted by HLW, regarding the MW-7 Area Study; are both approved and incorporated as part of the permit documents. The Department will continue to review future annual water quality reports and determine whether changes to the approved monitoring plan need to be made.

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

In accordance with the *July 10, 2014, Unnumbered Permit Amendment – TSS and Field Turbidity*, dated February 24, 2015, as submitted by HLW, and approved on August 17, 2015; the permit holder is authorized to utilize the correlation established between total suspended solids (TSS) and field turbidity as demonstrated in the February 24, 2015 correspondence. For future sampling events, a measurement of field turbidity and a 3:1 ratio (3 mg/l TSS:1 NTU turbidity) shall be used to estimate the TSS in the samples. Note that the DNR may require periodic resampling of TSS during future sampling events to verify the continued applicability of the 3:1 ratio.

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

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

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

j. The permit holder shall collect semiannual groundwater elevation measurements from the groundwater head monitoring points GPZ-1, GPZ-2, and GPZ-302 in order to measure the separation of the base of the MSWLF unit from the groundwater table as required in paragraph 113.6(2)"i". This data shall be included in the facility's AWQR.

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

4. The permit holder is authorized to recirculate leachate in accordance with the Leachate Application request, dated November 23, 2009, as submitted by FOX Engineering and resubmitted by HLW Engineering on May 1, 2012, as approved on August 9, 2012, and the following:

a. Leachate application is restricted to only those MSWLF units with a composite liner constructed in accordance with paragraph 113.7(5)"a". Additionally, the permit holder must maintain a 2:1 (horizontal: vertical) separation from the recirculation points and the unlined waste area as shown on the plan sheet, dated November 2, 2012, as submitted by HLW Engineering Group and approved on January 3, 2013.

b. The leachate recirculation system shall not contaminate waters of the state, contribute to erosion, damage cover material, harm vegetation, or spray persons at the MSWLF facility, pursuant to paragraph 113.8(2)"h".

c. Leachate shall not be applied on user vehicle access areas.

d. Leachate shall not be applied to vegetated areas or frozen waste cover. A means of frost protection must be provided for all leachate control elements.

e. Leachate shall be applied evenly on the working area.

f. Leachate recirculation shall be conducted only during hours of operation and when an operator is on duty.

g. Leachate shall be applied in a manner such that ponding or runoff will not occur.

h. Leachate recirculation shall be controlled such that not more than one foot of leachate head will be allowed to accumulate above the MSWLF unit liner.

i. Records shall be maintained as to the time and quantities of leachate application and be submitted with the facility's Annual Leachate Control System Performance Evaluation Report (LCSPER).

j. Leachate recirculation shall be immediately terminated if it causes ponding, runoff, excessive odor, vector control problems, vapor drift, ice formation, or operational problems. The DNR's local Field office shall be immediately notified if any of the above events occur.

5. The permit holder shall conduct subsurface gas monitoring in accordance with the Landfill Gas Plan contained in Section F of the 2022 Municipal Solid Waste Landfill Permit Renewal dated August 22, 2022, including gas vents as detailed in Construction Certification Passive Gas Vent Installation, dated May 15, 2025, both as submitted by HLW and the following:

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

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

6. The permit holder is authorized to use a geotextile by the trade name Fabrene® Type RTGPN9N9, as an alternative cover material for the active MSWLF unit, subject to the following:

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

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

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

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

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

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

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

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

7. The permit holder is authorized to stockpile waste asphalt, concrete, and bricks (rubble) for use as roadway material in accordance with the plans and specifications as submitted by the Rural Iowa Waste Management Association, dated March 11, 1997, and approved on April 4, 1997.

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

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

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

   c. The processed materials may be used as mulch for off-site purposes, on tipping area, roads, erosion areas and landfill areas with intermediate and final cover and on soil borrow areas.

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

9. The permit holder shall close the landfill site in accordance with the Closure and Postclosure Plan, as referenced in Section I of the 2022 Municipal Solid Waste Landfill Permit Renewal, dated August 22, 2022, as submitted by HLW Engineering Group (HLW); and the following:

   a. As noted in the Closure and Postclosure Plan, the permit holder shall submit to the department for review and approval a detailed Quality Control and Assurance (QC&A) Plan prior to any closure activities in Trenches 1 or 2.

b. The previous soil inventory referenced in the approved Closure and Postclosure Plan indicated that only half of the soils required for liner and cap construction are available. Prior to any future construction, the permit holder shall submit a revised soil inventory as an amendment to the Closure and Postclosure Plan.

c. The review comments, dated January 3, 1996, from the Hardin County Soil & Water Conservation District Commissioner relative to compliance with wind and soil loss limit regulations for the development and soil borrow areas included in the review, are incorporated as part of the permit documents.

XI. Special Provisions – Closed Area

1. The thirty-year closure and post closure period for the Vertical Expansion over the unlined fill area began on October 15, 2007.

2. The units specified in item #1 shall be closed and maintained in accordance with the Closure and Postclosure Plan, as referenced in Section I of the 2022 Municipal Solid Waste Landfill Permit Renewal, dated December 22, 2022, as submitted by HLW Engineering Group (HLW); and the following

3. The permit holder is prohibited from any additional waste disposal, recycling, composting, and other related landfill activities in the units specified in item #1 unless they are specifically approved through an amendment to this permit.

4. The Vertical Expansion over the unlined fill area was closed in accordance with the following Construction Certification reports. The final cover on this area consists of a 2-foot thick infiltration layer compacted to a minimum permeability of $1x10^{-7}$ cm/s overlain by an uncompacted 2-foot thick erosion layer.

   a. The Construction Certification, dated January 15, 1996, relative to the partial closure of Phase I of the vertical expansion area, as submitted by FOX Engineering Associates, Inc. and approved on February 7, 1996, is incorporated as part of the permit documents.

   b. The Construction Certification, dated December 3, 1997, and attached Plan Sheet 1 relative to the partial closure of Phase II of the vertical expansion area, as submitted by FOX Engineering Associates, Inc. and approved on February 20, 1998, is incorporated as part of the permit documents.

   c. The Construction Certification, dated October 21, 1998, relative to the partial closure of Phases II and III of the vertical expansion area, as submitted by FOX Engineering Associates, Inc. and approved on October 26, 1998, is incorporated as part of the permit documents.

d. The Construction Certification Report for the Phase IV partial closure, dated December 3, 1999, as submitted by FOX Engineering Associates, Inc. and approved on February 22, 2000, is incorporated as part of the permit documents.

e. The Construction Certification Report, and attached Sheet 1, for the Phase V partial closure, dated September 21, 2000, as submitted by FOX Engineering Associates, Inc. and approved on September 25, 2000, are incorporated as part of the permit documents.

f. The Construction Certification Report, and attached Sheet RD-1, for the Phase VI partial closure, dated November 22, 2001, as submitted by FOX Engineering Associates, Inc. (Fox) and approved on January 30, 2002, are incorporated as part of the permit documents.

g. The Construction Certification Report for the Vertical Expansion Closure, dated August 27, 2007; and the Record Drawing (Sheet RD-1), dated August 28, 2007; both relative to the closure of Phases VII and VIII; as submitted by FOX Engineering Associates, Inc. and approved October 15, 2007, are incorporated as part of the permit documents.

h. The *Waste Boundary Confirmation-South Side of Original Landfill t*o confirm the location of the waste boundary in the vicinity of MW-13R, dated July 3, 2017, as submitted by HLW, is hereby incorporated as part of the permit documents.

5. Hydrologic monitoring at the site shall be conducted in accordance with the Environmental Monitoring Plan, as included in Section F of the 2022 Municipal Solid Waste Landfill Permit Renewal dated August 22, 2022, as submitted by HLW; and the following:

   a. In accordance with the variance granted on January 31, 2012, the permit holder is authorized to implement the groundwater monitoring program for the Vertical Expansion over the unlined fill as follows:

      1) Conduct routine groundwater monitoring and statistical analysis in accordance with 113.10(5)[1] and 113.10(4)[1] rather than in accordance with 113.2(5)”d”[1] and 113.2(5)”e”[1]. The permit holder is required to conduct detection monitoring in accordance with 113.10(5)[1] and 113.10(4)[1] unless Department authorization to change the monitoring requirements is received.

      2) Collect background samples for detection monitoring during 5 semiannual events (2.5 years), rather than all five during the first year as required by 113.10(5)”b”[1].

      3) Retain the existing well spacing rather than implement the 300 ft. well spacing requirements of 113.10(2)”e”(2)[1].

      4) Implement the Monitoring Well Maintenance and Performance Reevaluation Plan requirements of 113.10(2)”f” (effective 12/10/2007), rather than the requirements of 113.2(5) (effective 12/10/2007) which by reference requires implementation of 113.21 (effective 01/15/2003).

Note that items 1 through 4 represent a partial approval of the requested variance and do not include variances from subrule 113.10(6)"b" regarding the initiation of assessment monitoring and 113.10(7) regarding an assessment of corrective measures. Assessment monitoring and, if required, an assessment of corrective measures shall be conducted in accordance with the requirements of 113.10(6) and 113.10(7).

b. The HMSP for the closed Vertical Expansion over the unlined fill area shall include upgradient monitoring points MW-36, MW-37, MW-39 and MW-40, and MW-47; downgradient monitoring points MW-7 (leachate tanks), MW-7A, MW-7B, MW-9, MW-13R, MW-14, MW-29, MW-31R, MW-33, MW-35R, and MW-211; and ACM monitoring points Tile ACM 1 and PECS 1.

    1) In conjunction with the Construction Certification Groundwater Collection Piping Assessment of Corrective Measures (ACM) documentation including record drawings, dated November 21, 2018, as submitted by HLW Engineering Group; new sampling points Tile ACM 1 (Outlet of the groundwater conveyance pipe) and PECS 1 (Outlet of the passively engineering conveyance system) are hereby incorporated as part of the HMSP.

c. Groundwater monitoring points not used for water quality analysis may be retained as water level measuring points.

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

e. The permit holder shall conduct background and routine semiannual groundwater sampling and analysis; as well as perform statistical tests for the approved monitoring points for Appendix I in accordance with rule 113.10(455B)[1]. Groundwater samples shall **not** be field-filtered prior to laboratory analysis.

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

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

6. The *Duplication of Source Control in the Selected Remedies- Assessment of Corrective Measures,* dated April 18, 2018, as submitted by HLW Engineering Group, relative to mitigation of groundwater impacts at monitoring well MW-13R, is incorporated as part of the permit documents, as follows:

a. The permit holder is authorized to initiate the selection of remedy process as outlined in 567 IAC Chapter 113.10(8). (Amendment #1)

b. The permit holder is authorized to implement the remedy in two phases as outlined in the April 18, 2018 submittal. (Amendment #1)

c. The *Construction Certification Groundwater Collection Piping Assessment of Corrective Measures* documentation including record drawings, dated November 21, 2018, as submitted by HLW Engineering Group, is hereby incorporated as part of the permit documents. (Amendment #2)

d. The *Drilling Results-Delineation near MW-13R* report, dated May 21, 2019, as submitted by HLW Engineering group, is hereby approved and incorporated as part of the permit documents.

7. The permit holder shall conduct subsurface gas monitoring in accordance with the Landfill Gas Plan contained in Section F of the 2022 Municipal Solid Waste Landfill Permit Renewal dated August 22, 2022, including gas vents as detailed in Construction Certification Passive Gas Vent Installation, dated May 15, 2025, both as submitted by HLW and the following:

   a. The permit holder shall quarterly monitor and annually report site methane concentrations in accordance with rule 113.26(15)[2]. Specific actions, as defined in the rules, shall be taken in the event of methane gas level limit exceedances.

   b. The permit holder shall annually submit a report by January 31 summarizing the methane gas monitoring results and any action taken resulting from gas levels exceeding the specified limits during the previous 12 months as a supplement to the facility's Annual Water Quality Report.

   c. The monitoring of the gas vents is to provide data as to the effectiveness of the vents in controlling gas migration.

8. Semiannual reports shall be prepared to contain a brief report describing the site's conformance and nonconformance with the permit and the approved plans and specifications during the inspections. These reports shall be submitted by April 30 and October 31 each year for the preceding six-month period to both the Field and Main offices of the Department.

9. All diversion and drainage systems must be maintained to the approved specifications to prevent run-on and runoff erosion, or other damage to the final cover. These diversion and drainage structures must be designed to meet a 25-year, 24-hour rainfall event.

10. The vegetative cover shall be reseeded as necessary to maintain good vegetative growth. Any invading vegetation whose root system could damage the compacted soil layer shall be removed or destroyed immediately.

11. The integrity and effectiveness of the final cover must be maintained by making repairs as necessary to correct the effects of settling, subsidence, erosion, or other events. If damage to the final cover compacted soil layer occurs, repairs shall be made to correct the damage and return it to its original specifications.

12. The permit holder is authorized to operate the leachate control system in accordance with the Leachate Control System Plan included as Appendix 5 of the 2007 Permit Renewal/Development and Operational Plans and Specifications, dated March 22, 2007, as submitted by FOX Engineering Associates, Inc., and approved on December 4, 2008; and the following:

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

    b. The leachate control system shall be operated and maintained in accordance with the approved permit documents. After the implementation of the leachate control system, the permit holder shall routinely collect the necessary information and evaluate the effectiveness of the system in controlling the leachate. All documentation shall be summarized in a Leachate Control System Performance Evaluation (LCSPE) Report. Effective control shall be considered as maintaining the lowest possible leachate head above the MSWLF unit liner and maintaining surface and groundwater quality standards at compliance monitoring points.

    c. Leachate head levels and elevations shall be measured quarterly at all piezometers and the volume of leachate collected and transported to the treatment works recorded. Records of leachate contaminants testing required by the treatment works and any NPDES permit for on-site treated leachate discharges shall be maintained.

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

    e. The permit holder shall annually submit the LCSPE Report, including record data, as a supplement to the facility's Annual Water Quality Report, as required by paragraph 113.26(8)d^2. The performance evaluation shall include proposed additional leachate

control measures and an implementation schedule in the event that the constructed system is not performing effectively.

13. By October 15, 2032, the permit holder shall submit a Post-Closure Care Reduction/Termination Plan. This plan shall include a description of activities that the permit holder shall conduct during the remaining term of the permit to demonstrate that leachate and groundwater quality, landfill gas, and final cover can be safely managed by alternatives to the permit such as an environmental covenant. In the absence of an approvable demonstration, the closure permit will be extended as necessary to allow for additional activities to support an approvable demonstration.

XII. Permit Renewal and Revision History

Date	Comment
11/29/22	Permit Renewed
6/2/23	Permit Revision No. 1. Revision to Special Provision – Closed Area XI.12.c to change the leachate level measurement frequency from monthly to quarterly.
10/31/23	Permit Revision No. 2. Added X.3.z to approve the start of construction of Trench 3 Phase 2 Expansion.
6/3/25	Permit Revision No. 3. Revised XI.7. to include newly installed gas vents in the gas monitoring plan.
12/8/25	X.7. Allows the storage and use of wood chips. X.1.13 Added provision regarding the steps to ending or reducing postclosure care.