January 3, 2024

CHRIS BALL EXECUTIVE DIRECTOR
DES MOINES COUNTY REGIONAL SOLID WASTE COMMISSION
1818 WEST BURLINGTON AVENUE
BURLINGTON IA 52601

RE: Des Moines County Sanitary Landfill
Permit Renewal Application (Doc #107815)
Permit No. 29-SDP-01-76P
Renewed Permit

Dear Mr. Ball:

Enclosed is the renewed permit for the Des Moines County Regional Sanitary Landfill. The permit and the approved plans must be kept at the sanitary disposal project in accordance with solid waste rule 567 IAC 113.11(1). Please review the permit with your operators, as they must become familiar with it.

Note that the permit contains special provisions that may require a response or action by you which, if not properly complied with, may prompt enforcement action by this department.

Please contact me if you have any questions at (515) 587-7638 or geoffrey.spain@dnr.iowa.gov.

Sincerely,

Geoffrey Spain
Digitally signed by Geoffrey Spain
Date: 2024.01.03 15:00:00 -06'00'

Geoffrey Spain
Environment Engineer
Land Quality Bureau

copy: Christine L. Collier, P.E.
SCS Engineers
1690 All State Court, Suite 100
West Des Moines, IA 50265

DNR Field Office #6

IOWA DEPARTMENT OF NATURAL RESOURCES
SANITARY DISPOSAL PROJECT PERMIT

I. **Permit Number:** 29-SDP-01-76P

II. **Permitted Agency:** Des Moines County Regional Solid Waste Commission

III. **Project Location:** The site is generally described as a portion of the SW ¼ of the SE ¼ and a portion of the SW ¼ of Section 15; a portion of the E½ of the SE¼ and a portion of the E½ of the NW¼ of Section 21; the N½ of the SW ¼, the W½ of the NW¼, and a portion of the E½ of the NW¼ of Section 22, all in T70N, R3W, Des Moines County, Iowa (as described in Appendix 15 of the 2006 Permit Renewal dated November 30, 2006, with a street address of 13758 Washington Road, West Burlington, Iowa)

IV. **Responsible Official**

Name: Chris Ball, Executive Director
Address: Des Moines County Regional Solid Waste Commission
1818 West Burlington Avenue
Burlington, IA 52601
Phone: (319)753-8126
Email: cball@dmcwaste.org

V. **Licensed Design Engineer**

Name: Christine L. Collier, P.E., SCS Engineers
Address: 1690 All State Court, Suite 100
West Des Moines, IA 50265
Phone: (515)631-6160
Email: ccollier@scsengineers.com
Iowa License Number: 17963

VI. **Date Permit Issued:** **01/03/2024**
Date Permit Revised:

VII. **Permit Expiration Date:** **01/03/2029**

VIII. **Issued by:** Geoffrey Spain Digitally signed by Geoffrey Spain Date: 2024.01.03 15:00:57 -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, and 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 comply with the gas control provisions of IAC 567 Chapters 20 through 31, including paragraph 23.1(2)"rrr" for the New Source Performance Standards and paragraph 23.1(5)"a" for the Emission Guidelines.

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 of 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

1. The permit holder is authorized to accept solid waste for disposal in accordance with the approved Des Moines County Regional Solid Waste Commission Comprehensive Plan. The Comprehensive Plan as approved by the DNR on April 29, 2019; 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 Des Moines County; Mount Pleasant, New London, Rome, Salem, Westwood, and Winfield in Henry County; and Morning Sun in Louisa 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 hereby approved Development and Operations Plan, included in the 2023 Permit Renewal Application, dated September 13, 2023, as submitted by SCS Engineers, and the following:

   a. Waste disposal is limited to Cell 1, Cell 2, the basal portions of Cell 3 and Cell 4, the lined abutment areas 1A, 1B, 4A, 4B, and Cell 5. Any further expansion beyond these areas shall require prior DNR approval.

   b. The Construction Observation Report for the Area 1C Abutment, dated August 1, 2013, as submitted by Barker Lemar Engineering Consultants, was approved on August 5, 2013 and incorporated in the permit documents.

   c. The Construction Observation Report for 2011 Leachate System Improvements, dated March 13, 2014, submitted by Barker Lemar Engineering Consultants, approved on July 10, 2014, is incorporated as part of the permit documents.

   d. The Construction Observation Report for Area 4C Abutment, dated October 10, 2014, submitted by Barker Lemar Engineering Consultants, approved October 20, 2014, is incorporated as part of the permit documents and filling is allowed in this area.

e. Additional cap testing results, included in the Construction Observation Report for Area 4C Abutment, as required in Permit Amendment 3, dated July 10, 2014, for the Abutment 2011 Leachate System Improvements, approved October 20, 2014, is incorporated as part of the permit documents.

f. The permit holder is authorized to construct Cell 5 and implement the proposed re-phasing plan per the hereby approved plans and specifications, dated July 11, 2016, and the revised plan sheets included in the response to a DNR comment letter, dated August 15, 2016 as submitted by Barker Lemar Engineering Consultants. Deviations from the approved plans and specifications shall be approved by the DNR prior to their construction. Any further construction beyond this area shall require prior DNR approval. No waste disposal shall commence in this cell until the construction certification report has been submitted and the cell has been inspected and approved by the Department.

g. For the newly constructed Cell 5, the first lift of municipal solid waste placed in a newly constructed unit or portion of a unit must be placed in accordance with paragraph 113.8(2)“b” in such a manner to minimize damage to the leachate collection system and liner.

h. The Construction Observation Report for Cell 5, dated October 15, 2018, as submitted by Barker Lemar Engineering Consultants, is hereby approved and included in the permit documents. Waste can now be disposed in Cell 5.

i. The Slope Stability Calculations, dated September 29, 2008, as submitted by Barker Lemar Engineering Consultants, is approved and incorporated into the permit.

j. The Settlement Calculations report, dated June 10, 2008, as submitted by Barker Lemar Engineering Consultants, is approved and incorporated into the permit.

k. The Vertical Expansion and GW-Sump Decommission request, dated October 17, 2016, as submitted by Barker Lemar Engineering Consultants, approved December 12, 2016, is incorporated into the permit documents.

l. The Plans and Specifications for Abutments D-1, D-2, and Cells 6 through 16, dated January 30, 2023, as submitted by EVORA Consulting, are approved and included in the permit documents.

m. The permit holder shall collect leachate from the leachate control system and properly dispose of the leachate either by treatment in an on-site facility, discharge with an NPDES permit; or by discharge to the City of Burlington 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).

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

o. The permit holder shall follow the approved Emergency Response and Remedial Action Plan (ERRAP) procedures during all emergencies pursuant to subrule 113.8(5). An updated ERRAP shall be submitted at the time of each permit renewal application. An updated ERRAP shall be included with any request for permit modification to incorporate a facility expansion or significant changes in facility operation that require modification of the currently approved ERRAP, included in the 2023 Permit Renewal Application, dated September 13, 2023, as submitted by SCS Engineers.

3. Hydrologic monitoring at the site shall be conducted in accordance with the Revised Hydrologic Monitoring System Plan (HMSP), included in the 2023 Permit Renewal Application, dated September 13, 2023, as submitted by SCS Engineers; and the following:

a. The HMSP shall include groundwater monitoring points MW4-89 (background), MW4-90, MW4-93, MW7-90R, MW-43, MW2-93, MW7-93, MW1-99, MW-37, MW-38, MW-39R, MW-40R, MW-41, PZ-10, PZ-11, and groundwater underdrain monitoring points GW-lagoons-00, and GW-lagoons-Cell-1W. PZ-11 and MW-41 are not required to be sampled during those events when an inward gradient toward the MSWLF Unit at those locations is confirmed provided background monitoring indicates the absence of contamination. An inward gradient can only be confirmed with either elevation data from the underdrain piezometers in the lined MSWLF units, or using leachate elevations from leachate piezometers in the unlined areas.

Due to contamination present in the Cell 1W groundwater underdrain GU-1 and the evaluation presented in document entitled Request for Permit Amendment, Decommission Groundwater Underdrain at Outfall - GU-1, dated January 10, 2013, prepared and submitted by Barker Lemar Engineering Consultants, discharge from this system was plugged as documented in the approved report Decommission Groundwater Underdrain at Outfall GU-1, dated February 12, 2013, as prepared by Barker Lemar Engineering Consultants.

Due to contamination present in the Cells 1 and 2 groundwater underdrain, which is not routinely monitored, discharge from this system was connected as required into the site's leachate collection system. Previously, this system was monitored at point GWSump. The groundwater underdrain beneath Cell 1 was connected to the Cell 2 leachate collection system in 1997 and the groundwater underdrain beneath Cell 2 was connected to the leachate collection system in 2007.

Due to contamination present at monitoring point GWSump2, which monitors Cell's 3 and 4 groundwater underdrain, discharge from this system is connected to the site's leachate collection and system.

b. Groundwater monitoring points GWP-1 and GWP-1W may be retained as water level measuring points.

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

d. The boring log/well installation details for monitoring wells MW-39R and MW-40R, dated December 15, 2016, as submitted by Barker Lemar Engineering Consultants, approved February 13, 2017, is incorporated into the permit documents. These monitoring points are added to the hydrologic monitoring system plan.

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 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.

f. 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.

g. 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.

h. 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.

i. The permit holder shall collect semiannual groundwater elevation measurements from the GWP-1 and GWP-1W in order to measure the separation of the base of the MSWLF unit from the groundwater table as required in paragraph 113.6(2)"i". This data shall be included in the facilities' AWQR.

j. 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.

k. The Assessment of Corrective Measures Report dealing with MW7-90R, MW9-90, and MW7-93, dated July 13, 2018, as submitted by Barker Lemar Engineering Consultants, is hereby approved.

l. The Selection of Remedy dealing with the Assessment of Corrective Measures (ACM) report (doc #92776), dated May 23, 2019, as submitted by Barker Lemar Engineering Consultants, is hereby approved.

m. The Construction Observation Report for extraction wells LW-12R, LW-13R, and LW-16, dated May 31, 2019, as submitted by Barker Lemar Engineering Consultants, is hereby approved.

n. The Corrective Action Groundwater Monitoring Program (CAMP), dated June 10, 2019, as submitted by Barker Lemar Engineering Consultants, is hereby included in the permit documents.

o. The Groundwater Monitoring Optimization Report, dated May 16, 2018, as submitted by Barker Lemar Engineering Consultants, is approved and included in the permit documents.

4. The Request for Permit Amendment for Spray Application as Leachate Recirculation, dated October 14, 2013, submitted by Barker Lemar Engineering Consultants, approved October 15, 2013, is incorporated as part of the permit documents as follows:

a. Leachate application is restricted to the working face, daily and intermediate cover areas in only those MSWLF units with a composite liner constructed in accordance with paragraph 113.7(5)“a”.

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 or frozen cover.

d. Leachate shall be applied evenly at a rate and manner determined by the operator such that ponding or runoff will not occur.

e. Leachate recirculation shall be conducted when an operator is on duty.

f. 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.

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

h. The permit holder shall retain in the operating record, daily logs containing the following documentation for each land application event:

   i. Date of application and weather conditions,
   ii. Cover soil conditions before application,
   iii. Leachate application rate and total volume applied,
   iv. A description of the application process and application area, including equipment used,
   v. Rainfall data for previous 24 hours and rainfall forecast for the next 24 hours,
   vi. Descriptions of any permit or rule noncompliance regarding ponding, runoff, odors, vectors, or vapor drift, resulting from leachate application and actions taken to return to compliance.

i. The permit holder shall report the effectiveness of the application process, including leachate volumes applied, and any noncompliance with this permit amendment within the facility Annual Leachate Control System Performance Evaluation Report.

5. The permit holder shall conduct subsurface gas monitoring in accordance with the Revised Landfill Gas Monitoring Plan, included in the 2023 Permit Renewal Application, dated September 13, 2023, as submitted by SCS Engineers; and the following:

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

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

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

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

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

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

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

7. Cell 1 West is only authorized to accept Construction and Demolition waste with the following conditions:

a. The waste shall be covered with a minimum of 1 foot of earth on or before Saturday of each work week.

b. At least a 2-foot cover of compacted earth shall be applied to any area of the sanitary landfill which will not be utilized for further disposal of solid waste for more than two months. The cover shall be graded to allow surface water runoff.

8. The request to allow disposal of gypsum wallboard production waste and sillment dust in Cell 1 West of the DMC Regional Landfill, dated February 18, 2016, submitted by the DMC Regional Waste Commission, approved March 9, 2016, is incorporated as part of the permit documents.

a. Gypsum wallboard waste and Sillment dust must be covered no less than once per week with a minimum of 6 inches of dirt or approved alternative cover material.

9. The permit holder is authorized to use an alternative daily cover (ADC) by the trade names Airspace Saver, Woven Polyolefin Fabric, TYPAR, and 315-ST Woven Geotextile as a

substitute for the six-inch daily soil cover requirement. Use of this material is subject to the following:

a. This product shall not be used as a substitute for intermediate or final soil cover.

b. All landfill operations personnel shall be trained by the alternative cover material manufacturer, or by an operator that has been trained by the manufacturer. The operator shall ensure that the product slurry is prepared according to the manufacturer's nominal slurry mix specifications.

c. The waste shall be compacted, before this product is applied, to provide an even surface to minimize ponding, prevent pockets, and to maximize uniform surface drainage.

d. This product shall be applied to the active waste face at the end of each day of operations and more frequently if necessary to control fire or fire hazards, blowing litter, scavenging, odors, insects, rodents, birds and other vectors. This product shall be cross applied when necessary to provide effective cover.

e. If this product does not set within one hour of application, the workface shall be covered with six inches of compacted soil or a fresh application of this product. The term set means form a cohesive barrier layer that adheres to the waste and resists washing off by precipitation. This product shall not be exposed for more than five (5) days. After five days, any area exposed with this product shall be either covered with a new lift of waste, a fresh application of this product, or six inches of compacted soil.

f. 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.

g. 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 use of this product ceases only on a temporary basis, such as during adverse operational or weather conditions.

h. Nothing in this provision shall be construed to authorize any waiver from the requirements of any other applicable state solid waste laws or regulations, or any deviations from permit provisions.

j. This provision shall not be interpreted to release the permit holder from responsibility under the Groundwater Protection Act for remedying conditions resulting from any release of contaminants to the environment.

10. The request to use the estimated 2,100 cubic yards or 2,700 tons of Stormwater Pond Sediment located on the Ammunition Plant (Generator) property located near Middletown, IA as alternative daily cover (ADC), dated November 30, 2020, as submitted by EVORA Consulting, is hereby approved and included in the permit documents.

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

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

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

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

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

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

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

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

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

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

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

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

14. The permit holder is authorized to land apply Bio-Solids in accordance with the plans and specifications dated February 16, 2000, and submitted by Barker, Lemar & Associates as approved on June 28, 2000; and conducted in accordance with criteria established in 567 IAC 67.1 through 67.11(455B).

15. The permit holder is authorized to stockpile, process, and directly dispose of railroad ties from the Iowa Ammunition Plant at the working face, per the request dated September 6, 2023, as submitted by the Des Moines County Regional Waste Commission; and the following:

    a. The material is permitted to be delivered to the site until September 22, 2033. Any extensions must be approved by the IDNR.

    b. The stockpile must be contained in a Subtitle D compliant disposal area.

    c. This product shall not be used as a substitute for intermediate or final cover.

    d. Nothing in this provision shall be construed to authorize any waiver from the requirements of any other applicable state solid waste laws or regulations, or any deviations from permit provisions.

    e. This provision shall not be interpreted to release the permit holder from responsibility under the Groundwater Protection Act for remedying conditions resulting from any release of contaminants to the environment.

16. The permit holder shall close the landfill site in accordance with the *Closure and Post-Closure Plans* dated April 1, 2013, as submitted by Barker Lemar Engineering Consultants and approved on July 30, 2013; and the following:

    a. Historical waste disposal areas were closed prior to October 25, 1989 according to the Closure/Post-Closure Plan dated June 28, 1992, as submitted by Green Environmental Services. These areas have been referred to as the (1) ravine finger areas or the old fill area south of the southern limits of the 1993 vertical expansion, and (2) the pre-1975 portion of the old city/county fill.

    b. The following final cover areas have approved certification reports and are incorporated into the permit:

        i. Cover Thickness Verification Report, dated February 26, 2010, prepared by Barker Lemar Engineering Consultants – approves temporary cover on abutment areas 1C, 4C, 1D and the western 1/3 of 4B and permanent cover on four ravine fingers.

        ii. The Construction Observation Report, dated February 4, 2011, as submitted by Barker Lemar Engineering Consultants, documents the construction of final cover on approximately 18 acres of the unlined MSWLF unit, including the entirety of the area referred to as the "Standard Closure Area" and portions of the area referred to as the "Modified Closure Area".

        iii. The Final Cover Analysis and Construction Observation Report, dated July 7, 2013, as submitted by Barker Lemar Engineering Consultants (documents closure of additional portions of the Modified Closure Area and temporary closure of the remainder of the Modified Closure Area).

    c. Upon construction of the Area 1D abutment liner/final cover, the permit holder shall submit to the Department certification that closure has been completed for the unlined MSWLF unit in accordance with the Closure Plan, dated April 1, 2013, and subrule 113.12(8).

17. The following construction activities have been approved and are incorporated as part of the permit documents:

    a. The Construction Certification Report for Cell 1A dated January 1996, approved January 23, 1996, as submitted by Midwest Environmental Consulting.

    b. The Construction Certification Report for Cell 2 dated January 21, 1997, approved January 29, 1997, as submitted by Barker Environmental Services, Inc.

    c. The Construction Certification Report Addendum #1 for Cells 1 and 2 dated April 15, 1997, approved on June 12, 1997, as submitted by Barker Environmental Services, Inc.

d. The Leachate Storage System Construction Certification Report for Lagoons A and B dated December 6, 2000, approved on February 5, 2001, as submitted by Barker, Lemar & Associates.

e. The Toe Drain Construction Certification Report for the old fill area dated January 18, 2002, approved on April 23, 2002, as submitted by Barker Lemar Engineering Consultants.

f. The Flint Creek Piping Construction Certification Report dated August 20, 2002, approved on February 24, 2003, as submitted by Barker Lemar Engineering Consultants.

g. The Seep Repair Construction Certification Report dated January 21, 2003, approved on February 24, 2003, as submitted by Barker Lemar Engineering Consultants.

h. The Leachate Collection System Construction Certification Report dated September 2004, and the Addendum to the Leachate Collection System Construction Certification Report dated December 2, 2004, approved on December 13, 2004, both as submitted by Barker Lemar Engineering Consultants related to construction of a leachate storage lagoon and associated piping.

i. The Sedimentation Pond Inlet Pipe Modification Construction Certification Report, dated April 6, 2005, approved on May 17, 2005, as submitted by Barker Lemar Engineering Consultants.

j. The Lagoon Liner Repair Certification Report for the West Leachate Lagoon (Lagoon #5) dated August 18, 2005, approved on October 6, 2005, as submitted by Barker Lemar Engineering Consultants.

k. The Construction Certification Report regarding the Installation of Leachate and Gas Wells and Gas Flares, dated January 25, 2006, approved on February 1, 2006, as submitted by Barker Lemar Engineering Consultants.

l. Engineering Certification of the Decommissioning of the Old Leachate Lagoons, dated April 21, 2006, approved on May 26, 2006, as submitted by Barker Lemar Engineering Consultants.

m. The Lagoon Liner Repair Certification Report, dated October 5, 2006, approved on May 26, 2006, as submitted by Barker Lemar Engineering Consultants.

n. The G.W. Sump Tie-in Pipe Construction Certification Report, dated December 19, 2006 regarding the connection of the sump discharge to the leachate collection system, approved on January 31, 2007, as submitted by Barker Lemar Engineering Consultants.

o. The Iowa Professional Engineer Certification of Alternative Landfill Liner System for Cells 1 and 2, basal liner only, dated July 13, 2007, approved on September 27, 2007, as submitted by Barker Lemar Engineering Consultants.

p. The Construction Certification Report, Cell 4 Construction, dated November 26, 2007, approved on December 18, 2007, as submitted by Barker Lemar Engineering Consultants.

q. The Monitoring Well Abandonment Documentation for wells MW1-89, MW2-89, MW8-93, and MW9-93, dated September 5, 2008, approved April 10, 2009, as submitted by Barker Lemar Engineering Consultants.

r. The Construction Certification Report, Cell 3 Construction, dated November 6, 2008, approved November 20, 2008, as submitted by Barker Lemar Engineering Consultants.

s. The Construction Certification Report, Cell 1W North Half Construction, dated December 10, 2009, approved January 19, 2010, as submitted by Barker Lemar Engineering Consultants.

t. The HMSP and LFG Monitoring Point construction documentation report for monitoring points LFGW-W1, LFGW-W2, PZ-11, MW-37, MW-28, and MW-41, dated March 12, 2010, approved May 25, 2010, as submitted by Barker Lemar Engineering Consultants.

u. The Construction Observation Report, Leachate Extraction System Construction, dated May 17, 2010, approved May 25, 2010, as submitted by Barker Lemar Engineering Consultants. The report documents the construction of eight leachate extraction wells, including the leachate/gas conveyance lines and extraction pumps; rerouting of the groundwater underdrain system monitored at GW-Sump-2 into the leachate collection system; a leachate interceptor trench in an unlined portion of the trench; and upgrades to the main lift station.

v. The monitoring well construction documentation for monitoring wells MW7-90R, MW-39, MW-40, and PZ-10, dated July 14, 2010, approved August 5, 2010, as submitted by Barker Lemar Engineering Consultants.

w. The Construction Certification Report, Area 1B Abutment Construction, dated September 14, 2010, approved September 20, 2010, as submitted by Barker Lemar Engineering Consultants.

x. The Construction Observation Report, Cell 1 West (South Half and Abutment), dated October 12, 2010, approved October 18, 2010, as submitted by Barker Lemar Engineering Consultants.

y. The Construction Observation Report, Area 4B Abutment Construction, dated June 22, 2011, including the June 29, 2011 addendum consisting of the permeability data for the protective layer, approved July 6, 2011, as submitted by Barker Lemar Engineering Consultants.

z. The Monitoring Well Abandonment & Extensions, dated December 19, 2012, as submitted by Barker Lemar Engineering Consultants is approved at the start of this permit.

aa. The Leachate Extraction Well Repairs – LW-9R and LW-11R, dated December 19, 2012, as submitted by Barker Lemar Engineering Consultants is approved at the start of this permit.

bb. The report Decommission Groundwater Underdrain at Outfall GU-1, dated February 6, 2013, as submitted by Barker Lemar Engineering Consultants is approved at the start of this permit.

XI. Permit Renewal and Revision History

Date	Comment