October 18, 2021

KELLY DANIELSON, DISTRICT MANAGER
IOWA WASTE SERVICES, LLC.
59722 290TH STREET
MALVERN, IA 51551

RE: Loess Hills Regional Sanitary Landfill
Permit #65-SDP-01-72P

Dear Mr. Danielson:

Enclosed is Amendment #2 to the permit issued on December 10, 2020, for the Loess Hills Regional Sanitary Landfill. The amendment must be kept with the permit and the approved plans at the sanitary disposal project in accordance with the recordkeeping and reporting requirements of subparagraph 113.11(1). Please review this amendment with your operators, as they must become familiar with it.

The enclosed amendment approves the *Construction Observation Report - Cells G East -N, dated October 18, 2021, as submitted by SCS Engineers*, and incorporates it as part of the permit documents.

The permit holder is authorized to use Cells G East -N for waste disposal.

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

If you have any questions, you may contact me at (515) 537-4051.

Sincerely,

Nina M. Booker
Digitally signed by Nina M. Booker
Date: 2021.10.18 12:28:35 -05'00'

Nina M. Booker
Environmental Engineer Senior
Land Quality Bureau

cc: Field Office #4

Evora Consulting
1801 Industrial Circle
West Des Moines, IA 50265

Weaver Consultants Group, LLC
6420 Southwest Blvd., Suite 206
Fort Worth, Texas 76109

Douglas Doerr, P.E.
SCS Engineers
14755 Grover Street
Omaha, Nebraska 68144

IOWA DEPARTMENT OF NATURAL RESOURCES
SANITARY DISPOSAL PROJECT PERMIT

I. **Permit Number:** 65-SDP-01-72P

II. **Permitted Agency:** Iowa Waste Services, LLC.
Loess Hills Regional Sanitary Landfill

III. **Project Location:** PCL A NE ¼ SE ¼ , and PT NE ¼ SE ¼ , and, PT NW ¼ SE ¼ , and SW ¼ NE ¼ , and SE ¼ NE ¼ , and TR S of DITCH in NE ¼ SW ¼ , and SE ¼ NW ¼ in Section 23, T72N, R42W, Mills County, Iowa

IV. **Responsible Official**

Name:	Kelly Danielson, District Manager
Address:	Iowa Waste Services, LLC.
	59722 290th Street
	Malvern, IA 51551
Mobile:	(402) 641-8239

V. **Licensed Design Engineer**

Name:	Brian L. Rath, P.E.
Address:	Evora Consulting
	1801 Industrial Circle
	West Des Moines, IA 50265
Phone:	(515) 256-8814
FAX:	(515) 256-0152

Iowa License Number: 14659

VI. **Date Permit Issued:** December 10, 2020
Date Permit Revised **October 18, 2021** **Amendment #2**

VII. **Date Permit Expires:** December 10, 2025

VIII. **Issued by:** Nina M. Booker Digitally signed by Nina M. Booker Date: 2021.10.18 12:54:30 -05'00'

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 Iowa Waste Services Association Comprehensive Plan. The Comprehensive Plan as approved by the DNR on November 4, 2015, any approved amendments to the plan; and the latest plan update, are incorporated as permit plan documents.

   The permitted service area includes: The cities of Carson, Carter Lake, Crescent, Council Bluffs, Hancock, Macedonia, McClelland, Oakland, Treynor, Underwood, Walnut, and the unincorporated areas in Pottawattamie County; and the cities of Emerson, Glenwood, Hastings, Henderson, Malvern, Pacific Junction, Silver City, and the unincorporated areas in Mills County and all cities and the unincorporated areas in Montgomery County.

2. The permit holder shall develop and operate the site in accordance with 567 IAC Chapter 113, and the hereby approved *2020 Permit Renewal Documentation*, dated June 17, 2020, as attached to the *Response to 09/17/2020 DNR Comment Letter* regarding the 2020 Permit Renewal Application, dated October 13, 2020, as submitted by Evora Consulting, and the following:

   a. Waste disposal is limited to Cell A, Cell C, Cell D East, Cell D West, Cell E East, Cell E West Cell F East, Cell F West, Cell G West, and **Cell G East - N**. The site vertical waste height shall not exceed an elevation of 1288 feet as shown on Sheet 6, *Top of Waste Grades* as contained in the 2020 *Permit Renewal Documentation as Revised October 13, 2020 by Evora*.

      Authorization to construct Cell G East, Cell M East, and Cell N in accordance with the *Permit Modification-Final Cover Plan and Excavation Plan Revisions*, dated December 2020; and the supplemental *Permit Modification-Final Cover Plan and Excavation Plan Revisions, dated February 19, 2021; both* as prepared and submitted by Weaver Consultants Group, LLC., and approved on April 16, 2021 is incorporated as part of the permit documents. (Amendment #1 Docs # 99200 and #99820)

      Any construction beyond these approved cells require prior Department approval. Also, prior to waste disposal in the approved expansion areas, and in accordance with 567 IAC 113.4(6), the department shall be notified when the construction of a new MSWLF unit or significant components thereof have been completed so that the department may

inspect the facility to determine if the project has been constructed in accordance with the design approved by the department.

b. The review comments, dated November 7, 1997 from the Department's Conservation and Recreation Division relative to the comprehensive listing of plant and animal species, in accordance with 567 IAC 113.6(2)"g" for all development and soil borrow areas, is incorporated as part of the permit documents.

c. The review comments, dated March 18, 1998 from the State Historical Society relative to the determination of the presence of and assessment of the impact on any archaeological, historical, or architecturally significant properties for all development and soil borrow areas on the proposed site, in accordance with 567 IAC 113.6(2)"h", is incorporated as part of the permit documents.

d. 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 Omaha 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).

   The permit holder is authorized to accept leachate from the Montgomery County Regional Sanitary Landfill for co-mingled temporary storage in the existing leachate lagoon and eventual transport to the City of Omaha POTW for treatment.

   The leachate transport and disposal shall be in accordance with the letter dated, February 16, 2001, as submitted by Barker Lemar and the authorization letter from the City of Omaha, dated January 18, 2001, and approved on October 27, 2003. Freeze protection and spill containment measures shall be implemented at each landfill for the transfer of leachate between sites.

   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).

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. In accordance with the variance request, dated March 29, 2019, as submitted by Barker Lemar Engineering Consultants; and the approval, dated June 17, 2019, 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)"l", as incorporated as part of the permit documents on July 22, 2019.

f. The permit holder shall follow the approved Emergency Response and Remedial Action Plan (ERRAP) procedures during all emergencies pursuant to subrule 113.8(5), and as contained in Appendix 6 of the hereby approved *2020 Permit Renewal Documentation*, dated June 17, 2020 as Revised October 13, 2020 by Evora. 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.

3. The permit holder is authorized to fill in units that have been approved and constructed in accordance with 567 IAC Chapter 113.7(5), and as contained in Appendix 4 of the hereby approved *2020 Permit Renewal Documentation*, dated June 17, 2020, as Revised October 13, 2020 by Evora; and the following.

a. The *Construction Observation Report* and *Drawings for Cell A*, both dated January 25, 1999, as submitted by Barker Lemar & Associates, Inc. (d.b.a. Barker Lemar Engineering Consultants) and approved on February 10, 1999 are incorporated as part of the permit documents.

b. The *Shop/Scalehouse Proposed Final Grading Plan*, dated March 23, 1999, as submitted by Barker Lemar Engineering Consultants and approved on July 14, 1999 is incorporated as part of the permit documents.

c. The *Construction Certification Report* for the construction of Cell C, dated August 9, 2004, as prepared and certified by Barker Lemar Engineering Consultants and approved on August 19, 2004 is incorporated as part of the permit documents.

d. The *Construction Certification Report* for the East Half of Cell D and the sedimentation pond, dated June 23, 2006, as prepared by Barker Lemar Engineering Consultants and approved on August 3, 2006 is incorporated as part of the permit documents.

e. The *Slope Stability Calculations*, dated June 6, 2008, as submitted by Barker Lemar Engineering Consultants, and approved on August 22, 2008, are incorporated as part of the permit documents.

f. The *Settlement Calculations*, dated May 29, 2008, as submitted by Barker Lemar Engineering Consultants, and approved on August 22, 2008, are incorporated as part of the permit documents.

g. The *Construction Certification Report* for the West Half of Cell D, dated October 10, 2008, and prepared by Barker Lemar Engineering Consultants and approved on November 12, 2008 is incorporated as part of the permit documents.

h. The *Construction Certification Report* for the placement of the tire chip protective layer on the sideslope of the West Half of Cell D, dated January 19, 2009, and prepared by Barker Lemar Engineering Consultants and approved on February 4, 2009 is incorporated as part of the permit documents.

i. The *Leachate Piezometer Plugging Documentation* for LW-1, dated January 20, 2009, and prepared by Barker Lemar Engineering Consultants, and approved on February 4, 2009 is incorporated as part of the permit documents.

j. The permit holder is authorized to utilize Auto Shredder Residue from Alter as a substitute for the 12-inch granular drainage layer over the geocomposite drainage layer, in accordance with the request dated July 30, 2009, and approved on September 30, 2009.

k. The *Construction Certification Report* for the construction of the abutment liner between Cell D West and the unlined area, dated September 23, 2009, as submitted by Barker Lemar Engineering Consultants, and approved October 1, 2009, is incorporated as part of the permit documents.

l. The *Construction Observation Report* for the East Half of Cell E Construction, dated December 23, 2010 and supporting information: Proposed Tire Derived Aggregate Stress Colum Testing Program, dated June 10, 2011, East Half of Cell E Project Certification and Shelby Tube Locations, dated June 15, 2011 and Stress Column Test Results, dated July 12, 2011 all as submitted by Barker Lemar Engineering Consultants, and approved on July 18, 2011, is incorporated as part of the permit documents.

m. Plan sheets 22, 23, 24 and 28, dated January 31, 2012, as submitted by Barker Lemar Engineering Consultants, and approved on May 21, 2012, revised to show the required one-foot thick granular layer over the geosynthetic leachate drainage layer, are incorporated as part of the permit documents

n. The *Construction Observation Report* for the East Half of Cell F Construction, dated December 7, 2012, as submitted by Barker Lemar Engineering Consultants, and approved on December 17, 2012, is incorporated as part of the permit documents.

o. The *Construction Observation Report for the West Half of Cells E and F Construction*, dated March 23, 2016, as submitted by Barker Lemar Engineering Consultants, and approved on April 21, 2016, is incorporated as part of the permit documents.

p. The *Construction Observation Report for Cells E and F West*, dated November 14, 2019, and the *Supplement to the Cells E and F West Construction Observation Report- Proctors,* dated November 21, 2019*; both* as submitted by Barker Lemar Engineering Consultants, as approved on November 22, 2019 is incorporated as part of the permit documents.

q. The *Construction Observation Report - Cells G West and Area D Final Cover*, dated January 13, 2020, as submitted by Barker Lemar Engineering Consultants, as approved on February 13, 2020 is incorporated as part of the permit documents.

r. The *Construction Observation Report - Cells G East -N*, dated October 18, 2021, as submitted by SCS Engineers, is hereby incorporated as part of the permit documents.

The permit holder is authorized to use *Cells G East -N* for waste disposal.

Cell M was not included as a part of this construction.

The permit holder shall place documentation in the operating record and a copy submitted to the department that adequate cover material was placed over the top of the leachate collection system in the MSWLF unit or that freeze/thaw effects had no adverse impact on the compacted clay component of the liner, as applicable. (Amendment #2 Doc #101454)

4. Hydrologic monitoring at the site shall be conducted in accordance with 567 IAC 113.10; and the Hydrologic Monitoring System Plan (HMSP) as contained in Appendix 9 of the hereby approved *2020 Permit Renewal Documentation*, dated June 17, 2020, as Revised October 13, 2020 by Evora; and the following:

a. The HMSP shall include background groundwater monitoring points MW-14 and MW-17, downgradient groundwater monitoring points, MW-7, MW-8R, MW-10R, MW-11R, MW-25, MW-26R, MW-27R, MW-28, and MW-29; underdrain groundwater monitoring point GU-1; and surface water sampling point SW-4.

b. 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.

Abandonment of any monitoring point requires prior approval by the Department. The permit holder is authorized to properly plug and abandon water level gauging points not proposed for water quality analysis. The permit holder shall submit Department Form 542-1226 for the abandonment of each well within 30 days of abandonment.

The monitoring well construction documentation forms for monitoring points MW-25, MW-28, MW-29, and MW-30, dated November 1, 2011, as submitted by Barker Lemar Engineering Consultants, and approved on December 19, 2011, are incorporated as part of the permit documents.

The monitoring well construction documentation forms for monitoring points MW-26 and MW-27, dated April 19, 2012, as submitted by Barker Lemar Engineering Consultants, and approved on May 21, 2012, are incorporated as part of the permit documents.

The monitoring well construction documentation form for monitoring wells MW-8R, MW-11R, MW-26R, MW-27R, and bracketing well MW-31; and the well abandonment forms for monitoring wells MW-26 and MW-27, attached to the correspondence, dated December 28, 2020, as submitted by Evora Consulting, and approved on April 16, 2021 are incorporated as part of the permit documents. (Amendment #1 Doc #99202)

c. The permit holder shall conduct background and routine semiannual groundwater sampling and analysis; as well as perform statistical tests for the approved monitoring points for the appropriate list of parameters in accordance with rule 113.10(455B). In addition, the permit holder shall either sample for total suspended solids (Method I376585, with a reporting limit goal of <= 2 mg/l), or measure turbidity levels, as a means to correlate turbidity to TSS. Groundwater samples shall **not** be field-filtered prior to laboratory analysis.

d. 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 increased 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.

   Groundwater monitoring wells MW-8R and MW-11R are approved for the alternative 5-year sampling frequency for the full Appendix II list.

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

f. The permit holder shall collect semiannual groundwater elevation measurements from GWPZ-E 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.

g. The *Assessment of Corrective Measures Report*, dated December 20, 2019; as submitted by Barker Lemar Engineering Consultants and approved on June 29, 2020, is incorporated as part of the permit documents.

The permit holder shall proceed with a public meeting, selection of a remedy, and implementation of a corrective action plan in accordance with the requirements of 113.10.

h. The *Selection of Remedy and Corrective Action Groundwater Monitoring Program*, dated October 30, 2020, as submitted by Evora Consulting, is hereby incorporated as part of the permit documents.

i. 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.

5. The permit holder shall conduct subsurface gas monitoring in accordance with the *Landfill Gas Monitoring Plan*, as contained in Appendix 8 of the hereby approved *2020 Permit Renewal Documentation*, dated June 17, 2020, as Revised October 13, 2020 by Evora, and the following:

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

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

   c. *The Gas Vent As-Built Information*, dated May 4, 2010, and revisions dated June 22, 2011; both as submitted by Barker Lemar Engineering Consultants, and approved on July 18, 2011, are incorporated as part of the permit documents.

   d. The *Gas Collection and Control System Design and Construction Notification*, dated May 1, 2020; as well as the *Gas Collection and Control System Design Public Notification*, dated May 15, 2020; both as submitted by Golder Associates Inc. and approved on August 6, 2020, are incorporated as part of the permit documents.

   e. The Construction Quality Assurance Report - 2020 Gas Collection and Control System, dated February 16, 2021, as submitted SCS Engineers and approved April 16, 2021, is incorporated as part of the permit documents. (Amendment #1 Doc #99776)

6. The permit holder is authorized to accept Automobile Shredder Residue (ASR) from the Alter Trading Corporation facility in Council Bluffs, Iowa in accordance with the August 6, 1998 correspondence, and October 2, 1998 facsimile and included ASR test data, as submitted by Terracon Environmental, Inc. (Terracon) and approved on October 13, 1998; and in accordance with the *Request for Permit Amendment– Use of Auto Shredder Residue*

as Alternative Daily Cover, dated August 18, 2015, as submitted by Barker Lemar Engineering Consultants, and approved on May 17, 2016.

The permit holder is authorized to use an ASR/Soil combination or solely ASR as an alternative cover material, subject to the following:

a. The permit holder shall remove all materials exceeding 1.5 inches in size before solely using ASR an alternative daily cover material. A stockpile quantity exceeding 200 tons, or approximately 1-week usage, shall be disposed in the workface area at the end of each work week. When solely using ASR, only ASR placed at a ratio of 3:1 (3 tons of waste to 1 ton of approved ASR) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste.

   OR,

   The permit holder shall remove all materials exceeding 1.5 inches in size before mixing ASR with soil on a 50% by volume basis and using as an alternative daily cover material. The ratio of ASR to soil shall not exceed 50% ASR by volume. Quantities exceeding 350 tons per stockpile, or approximately 1-week usage, shall be disposed in the workface area. When using a mixture of ASR and soil, only ASR placed at a ratio of 6:1 (6 tons of waste to 1 ton of approved ASR) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste.

b. The ASR or ASR/Soil mixture may be used in lieu of the 6-inch daily cover requirement. Any additional ASR applied above the 6-inch requirement will not be exempt from tonnage fees. The ASR or ASR/Soil mixture shall not be used as a substitute for intermediate or final soil cover.

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

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

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

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

g. The use of ASR or ASR/Soil mixture for daily cover usage by any other generator than the one approved above shall be subject to specifications approval by the DNR.

h. If the ASR or ASR/Soil mixture is found by the DNR not to be performing satisfactorily, its use shall be discontinued and the remaining materials shall be disposed in the working face.

7. The permit holder is authorized to accept lead contaminated soil from the City of Omaha. The soil may be used as alternative daily cover placed over the workface after each day of operation, or be directly placed in the working face for disposal, as follows:

   a. Prior to shipment, each 1,000-tons of soil shall be tested for lead using the Toxicity Characteristic Leaching Procedure, TCLP. Any load of soil that tests above 5.0 mg/l for lead shall be rejected.

   b. All soil shall either be used as alternative daily cover or disposed of the same day the shipment is received.

   c. The permit holder is authorized to use lead contamination soil at a ratio of 3:1 (3 tons of waste to 1 ton of lead contaminated soil) as an alternative daily cover. Any lead contaminated soil used in excess of that ratio shall be reported as waste

   d. A quarterly report shall be submitted to the Department detailing the amount of soil accepted, the amount of soil used for daily cover, the size of the working face of the landfill at the time of placement, TCLP analytical results, the amount and location of soil that is landfilled and soil that is used as daily cover.

   e. This authorization is valid until the expiration of this permit. At that time, the permit holder shall request the authorization be extended.

8. The permit holder is authorized to collect grass clippings, leaves and garden wastes for the purposes of land application reuse as mulch, soil conditioner or for other beneficial reuses.

   a. Non-composted yard waste shall not be stored for more than two (2) weeks before land application.

   b. All non-biodegradable bags and containers shall be removed prior to land application.

   c. The wastes 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. Yard waste shall be land applied at a rate not to exceed 2 tons per year per acre.

   e. 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.

9. 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.

10. 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.

11. The permit holder is authorized to recirculate leachate in accordance with the *Request to Recirculate Leachate,* dated October 28, 2015, as submitted by Barker Lemar Engineering Consultants and approved on April 21, 2016, and the following:

    a. Leachate application/injection is restricted to only those MSWLF units with a composite liner constructed in accordance with paragraph 113.7(5)“a”; having a waste thickness of at least 20 feet; and being located no closer than 75 feet from the edge of the liner.

    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 in the application 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/injection and be submitted with the facility 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, operational problems, or exceeds the 1-foot head level above the liner in Cell D East. The DNR's local Field office shall be immediately notified if any of the above events occur.

12. The Department of Natural Resources electronic mail document (DocDNA #78905), dated December 11, 2013, and its attachments regarding the pipeline running through future phases of the landfill (northeast corner), is incorporated as part of the permit documents.

13. The permit holder is authorized to solidify liquid wastes in accordance with the following conditions:

a. The *Solidification Trial Final Report*, dated June 22, 2020, as submitted by Justin Franks, Assistant District Manager, Loess Hills Regional Landfill, and approved June 29, 2020, is incorporated as part of the permit documents. The trial period demonstration period of 120 days was approved on January 11, 2019. The actual demonstration period began March 5, 2020, with an anticipated end date of July 3, 2020.

b. All liquid waste solidification processes shall be conducted over the composite liner constructed in Cell D. Furthermore, the solidification process shall be offset at least 75 feet from the north edge of the Cell D abutment liner. No solidification activities shall take place in the Area D closure area.

c. Liquid wastes shall be unloaded in two pits excavated into the existing waste. Any wastes removed during excavation of the pits shall be properly disposed in the active area of the landfill. An additional above-ground, enclosed container may be kept near the solidification process area to store absorbent materials and keep them dry. The permit holder must direct all liquid wastes to the solidification processing area immediately upon receipt at the landfill. No liquid wastes may be stored on-site.

d. The permit holder is authorized to use nonhazardous absorbent coal combustion residue (CCR) materials, wood wastes, sawdust, or similar materials as solidifying agents. Use of any other absorbents must be approved by the DNR prior to use. The liquids will be mixed with absorbent materials and mixed until the liquids have been solidified sufficiently to pass the paint filter test. No run-off of liquids, or overflowing of the containers shall occur during mixing.

   If fly ash is used as the absorbent material, paint filter tests shall not be required if the application rate is less than 200 gallons of liquid waste per cubic yard of fly ash and visual observation of the final mixture indicates no free liquids.

e. The solidified liquids shall be disposed at the working face.

f. Liquid waste solidification processes shall not be conducted during significant rain events, high wind conditions, or extremely cold temperatures.

g. Documentation of the following must be retained and made available for DNR review upon request:
   1) Liquids waste generator name,
   2) Waste description and quantities,
   3) Documentation that the accepted materials are nonhazardous, and
   4) EPA Method 9095B paint filter test results, if required.

h. CCR intended to be used as an absorbent shall only be stored onsite for a maximum period of 1 week unless covered to prevent blowing dust (i.e. tarp).

i. The permit holder shall remit quarterly, the appropriate tonnage fees for all solidified liquid wastes, including both the liquid wastes (which includes solidification of on-site generation of leachate) and absorbents used to treat the wastes, on the appropriate reporting forms. The use of the absorbents in this manner constitutes treatment of waste for disposal and therefore is not a beneficial use.

j. If, at any time, the Department or permit holder deems the project to be ineffective or otherwise unsatisfactory, the permit holder shall immediately terminate the project until otherwise notified.

14. The permit holder shall close the landfill site in accordance with the *Closure Plan* as included in the *2020 Permit Renewal Documentation*, dated June 17, 2020, as Revised October 13, 2020 by Evora, and the following:

a. The *Modified Testing Program for Closure Areas A and B*, dated September 9, 2011, as submitted by Barker Lemar Engineering Consultants, and approved on October 27, 2011, is incorporated as part of the permit documents.

b. The *Final Cover Re-verification Landfill Closure (Areas A and B)*, dated June 28, 2012, as submitted by Barker Lemar Engineering Consultants, and approved on August 15, 2012, is incorporated as part of the permit documents.

c. The *Design Update-Closure Area D Final Cover*, dated May 29, 2014, as submitted by Ayres Associates, and approved on September 15, 2015, is incorporated as part of the permit documents.

d. The *Final Cover Verification for Landfill Closure (Area C)*, dated March 30, 2016, as submitted by Barker Lemar Engineering Consultants and approved on April 21, 2016, relative to the verification of existing final cover for the 4.17 acre area, is incorporated as part of the permit documents.

   The *Final Cover Verification for Landfill Closure (Area C)*, dated February 25, 2020, as submitted by Barker Lemar Engineering Consultants and approved on June 29, 2020, relative to the verification of the repair the 2-foot erosion layer of the Area C cover area identified in the March 30, 2016 verification document, is incorporated as part of the permit documents.

e. The *Construction Observation Report - Cells G West and Area D Final Cover*, dated January 13, 2020, as submitted by Barker Lemar Engineering Consultants and approved on February 13, 2020, is approved and incorporated as part of the permit documents.

f. Revisions to the construction of the permitted final cover, in accordance with the *Permit Modification-Final Cover Plan and Excavation Plan Revisions*, dated December 2020; as prepared and submitted by Weaver Consultants Group, LLC., and approved on April 16, 2021, is incorporated as part of the permit documents. (Amendment #1)