November 16, 2020

KATHRYN KAUL-GOODMAN CHAIRMAN
MAHASKA COUNTY SOLID WASTE MANAGEMENT COMMISSION
2979 HIGHWAY 63
OSKALOOSA IOWA 52577

Re: Mahaska County Sanitary Landfill
Permit No. 62-SDP-01-74
Landfill Gas Lateral Construction Documentation Report (Document No. 98749)
Initial Waste Cell Capping Construction Documentation Report (Document No. 98898)
Permit Revision

Dear Ms. Kaul-Goodman:

Enclosed is the revised permit for the Mahaska County 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.

The Iowa Department of Natural Resources has reviewed and herby approves the Landfill Gas Lateral Construction Documentation Report, dated October 12, 2020, and the Initial Waste Cell Capping Construction Documentation Report, dated November 9, 2020, both as prepared by Terracon Consultants, Inc. Note that the permit contains special provisions that may require a response or action which, if not properly complied with, may prompt enforcement action by this department.

If you have any questions please contact me at (515) 725-8314.

Sincerely,

Michael W. Smith, P.E.
Environmental Engineer Senior

enclosure

cc: Michael Fairchild
Mahaska County Sanitary Landfill
2979 Highway 63
Oskaloosa, IA 52577

Jake A. Haden
Terracon Consultants, Inc.
600 SW 7th Street, Suite M
Des Moines, IA 50309

David M. Svingen, P.E.
Terracon Consultants, Inc.
15080 A Circle
Omaha, NE 68144

DNR Field Office #5

IOWA DEPARTMENT OF NATURAL RESOURCES
SANITARY DISPOSAL PROJECT PERMIT

I. **Permit Number:** 62-SDP-01-74

II. **Permitted Agency:** Mahaska County Solid Waste Management Commission

III. **Project Location:** Section 12 Township 74N Range 16W

IV. **Responsible Official**

Name: Kathryn Kaul-Goodman, Chairman
Address: Mahaska County Sanitary Landfill
2979 Highway 63
Oskaloosa, IA 52577
Phone: 641-204-2800

V. **Licensed Design Engineer**

Name: David M. Svingen
Address: Terracon Consultants, Inc.
15080 A Circle
Omaha, NE 68144
Phone: 402-330-2202
FAX: 402-330-7606
Iowa License Number: 11802

VI. **Date Permit Issued:** **November 20, 2019**
Revised: **July 6, 2020**
Revised: **July 9, 2020**
Revised: **November 16, 2020**

VII. **Permit Expiration Date:** **November 20, 2024**

VIII. **Issued by:** Michael W. Smith
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 Mahaska County Solid Waste Planning Area Comprehensive Plan. The Comprehensive Plan as approved by the DNR on February 22, 2016; 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 Mahaska County; and three industries (Cargill, Inc., Ajinimoto, Inc., and Heartland Lysine, Inc.) in Monroe County, the part of the City of Eddyville that is in Wapello County, and the City of Corydon in Wayne 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 Permit Renewal Application dated September 30, 2019, as prepared by Terracon Consultants, Inc. and approved on November 20, 2019, and the following:

   a. Waste disposal in accordance with the Sheet 4 Final Grade Contour in the Closure Plan-Revised, dated December 10, 2014, is limited to Transition Area, Cell 1, and Cell 2. The site vertical height shall not exceed a maximum waste elevation of 880 ft. ASL in the vicinity of 7900E 17450N. Any further expansion beyond these locations shall require prior DNR approval.

   b. 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 Oskaloosa Waste Water Treatment plant 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).

c. 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.

d. 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.

3. The following cell construction projects have been approved:

a. The Site Operation and Development Plan Addendum for Transition Cell, as prepared September 3, 1996 by Terracon Consultants, Inc. and approved February 26, 1997, is incorporated into the permit documents.

b. The Construction Certification Report for the Cell 1, dated December 30, 2004, and August 23, 2005, as prepared by Terracon Consultants, Inc. and approved on November 16, 2005, is incorporated into the permit documents.

c. The Quality Control and Assurance Report for the Leachate Storage Lagoon, dated July 18, 2013, prepared by HLW Engineering Group, and the Leachate Lagoon Fence As-Built, dated November 11, 2014, prepared by Terracon Consultants, Inc., was approved for use on November 24, 2014, and incorporated into the permit.

d. The Request for Conditional Approval of Cell 2 As-built, dated December 12, 2014, as prepared by Terracon Consultants, Inc. was approved on December 12, 2014, and incorporated into the permit.

e. The 2015 Cell 2 Phase 2 Liner Construction Report, dated November 12, 2015, and the Cell 2 Phase 2 Liner Construction Report Addendum, dated December 10, 2015, both as prepared by Terracon Consultants, Inc., were approved December 11, 2015 and incorporated into the permit.

f. The As-Constructed Liner Repair report, dated April 20, 2018, as prepared by Terracon Consultants, Inc., was approved October 22, 2018, and incorporated into the permit.

4. Hydrologic monitoring at the site shall be conducted in accordance with the Hydrologic Monitoring System Plan Revision 6.0 (HMSP), dated October 19, 2018, as prepared by Terracon Consultants, Inc. and approved on November 20, 2019; and the following:

   a. The HMSP shall include groundwater monitoring points GU-1, DW-8, UW-9R, UW-9RA, UW-10, UW-10A, UW-11, PZ-14, DW-15, DW-19, UW-21, DW-23, DW-24, and surface water monitoring points DS-3 and US-4.

   b. Monitoring points DW-5, DW-6, DW-7, PZ-7A, PZ-8A and DW-20 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 construction documentation and boring logs for DW-18A and DW-18B prepared July 12, 2005, by Terracon Consultants, Inc. are hereby incorporated as part of the permit documents.

   e. The construction documentation and boring logs for DW-22, DW-23, PZ-7A and PZ-8A prepared September 14, 2011, by Terracon Consultants, Inc. are hereby incorporated as part of the permit documents.

   f. The construction documentation and boring logs for UW-9RA and UW-10A installed November 22, 2011, and prepared February 28, 2012, by Terracon Consultants, Inc. are hereby incorporated as part of the permit documents.

   g. The Well Abandonment and Installation documentation, dated August 10, 2018 as prepared by Terracon Consultants, Inc. is hereby approved and incorporated into the permit documents. Monitoring wells DW-18A, DW-18B and DW-22 and gas probes SG-6 and SG-7 were abandoned. Monitoring well DW-24 and gas probes SG-6R and SG-7R were constructed.

   h. The Monitoring Point Installation and Abandonment Work Plan, dated January 24, 2018, as prepared by Terracon Consultants, Inc., approved April 4, 2018, is incorporated into the permit.

i. The permit holder shall conduct background and routine semi-annual groundwater sampling and analysis; as well as perform statistical tests for the approved monitoring points for Appendix I 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 TSS 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.

j. 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.

k. 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.

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

m. The Alternative Source Demonstration Report, dated April 29, 2016, as prepared by Terracon Consultants, Inc., demonstrates Acid Mine Drainage (AMD) as the source of cadmium, cobalt, nickel and zinc detected in monitoring well DW-23 at concentrations in excess of the applicable Groundwater Protection Standard is hereby approved. Corrective action for these occurrences is not required. Groundwater monitoring point DW-23 remains in assessment monitoring and as such should be sampled for all Appendix I parameters and any Appendix II parameters detected on a semi-annual basis and for the full Appendix II list of parameters on a five year frequency. The last full Appendix II sample was collected in 2012.

n. As an ongoing condition of the Alternative Source Demonstration Report, dated April 29, 2016, the permit holder shall include an evaluation in each Annual Water Quality Report (AWQR) of alkalinity, aluminum, iron, pH and sulfate results in groundwater and surface water to determine if acid mine drainage impacts are stable, expanding or retracting across the site. The evaluation shall include a discussion of AMD impacts of all wells with SSI's or statistical significant exceedances of groundwater protection standards attributable to AMD, and all other compliance point wells that exhibit evidence of AMD but may not currently be SSIs.

o. An 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 AWQR Format.

5. In accordance with the disposal of untreated petroleum contaminated soils variance request dated June 30, 2020, and approved July 8, 2020, as submitted by Mahaska County Solid Waste Commission, the permit holder is authorized to directly, and immediately upon receipt, dispose of untreated petroleum contaminated soils (PCS) at the working face and the following:

   a. The PCS must be determined to be not hazardous (via federal exemption and/or analytical testing) and immediately buried at the working face.

   b. The untreated PCS must not contain free liquids as determined by the paint filter liquids test (EPA Method 9095), nor exhibit one of the four characteristics of a hazardous waste defined in 40 CFR Part 261 Subpart C for ignitability (DOO1), corrosivity (D002), reactivity (D003) and toxicity (D004-D0043).

   c. PCS resulting from the cleanup of petroleum underground storage tanks are exempt from RCRA hazardous water management if the media and debris 1) exhibit the TC for D018-D043, and 2) are subject to the corrective action requirements in 40 CFR Part 280 of the UST regulations. This exemption does not apply to petroleum contaminated media resulting from spills or releases from aboveground storage tanks, other surface spills, or if the PCS become contaminated with a listed hazardous waste.

   d. PCS meeting the above-referenced criteria is deemed a "solid waste" and therefore applicable waste flow and tonnage fee requirements will need to be adhered. PCS may continue to be received for remediation pursuant to subrule 109.11(2), or accepted from outside the planning area for disposal as long as the provisions of IAC 567 Chapter 101.4 are followed (i.e. maintain written approvals).

6. The permit holder is authorized to recirculate leachate in accordance with the request for Permit Amendment – Leachate Recirculation/Evaporation), dated July 2, 2020, as submitted by Terracon and approved on July 6, 2020; 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".

   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 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.

7. The permit holder shall conduct subsurface gas monitoring in accordance with the 2009 Gas Monitoring Report, dated June 21, 2010, as prepared by Terracon Consultants, Inc. and the following:

   a. The permit holder shall quarterly monitor at SG-1, SG-2, SG-3, SG-5, SG-6(R), SG-7(R), SG-8, DW-8, UW-9R, UW-9A, UW-10, UW-10A, VP-1, VP-2, VP-3, VP-4, VP-5, VP-6, VP-7, VP-8, Scale House Basement, Scale Pit, and Shop. The permit holder shall be 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 Landfill Gas Trench Construction Documentation Report, dated October 7, 2015, as prepared by Terracon Consultants, Inc. is incorporated into the permit.

   c. 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).

   d. The Landfill Gas Lateral Construction Documentation Report (Document No. 98749), dated October 12, 2020, as prepared by Terracon Consultants, Inc., is approved on November 16, 2020, and incorporated into the permit.

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 Foundry Sand from Clow in Oskaloosa, Iowa. The permit holder is authorized to use a foundry sand/soil combination as an alternative cover material, subject to the following:

    a. The ratio of foundry sand to soil shall not exceed 50% foundry sand by volume. Quantities exceeding 1-week usage shall be disposed in the workface area. Only foundry sand placed at a ratio of 6:1 (6 tons of waste to 1 ton of approved foundry sand) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste. Pursuant to Iowa Code section 455B.310(9), foundry sand used by a sanitary landfill as daily cover is exempt from imposition of the tonnage fee if the foundry sand is generated by a foundry located within the state and if the foundry sand is provided to the permit holder at no cost to the permit holder.

    b. The foundry sand/soil may be used in lieu of the 6-inch daily cover requirement. Foundry sand/soil shall not be used as a substitute for intermediate or final soil cover.

    c. The waste must be compacted, before the foundry sand/soil is applied, to provide an even surface to minimize ponding, prevent pockets, and to maximize uniform surface drainage

    d. Foundry sand/soil 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, and rodents.

    e. The soil ratio shall be increased, if necessary, to optimize cover performance relative to the criteria stated in items “c” and “d” above.

    f. The permit holder shall scarify the foundry sand/soil 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.

g. The permit holder shall maintain in the landfill files appropriate semi-annual laboratory analytical documentation that demonstrates that the foundry sand is not hazardous by TCLP. In addition, the permit holder shall maintain in the landfill files appropriate annual laboratory analytical documentation of total metals (antimony, arsenic, barium, beryllium, boron, cadmium, chromium (hexavalent and trivalent (see DNR Form 542-0652)), cobalt, copper, fluoride, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc) for comparison to Iowa Statewide Standards for soils. Documentation reporting of such testing shall be submitted to both the DNR's Main and local Field office.

h. The use of foundry sand/soil for daily cover usage by any other generator than the one approved above shall be subject to specifications approval by the DNR.

i. If the foundry sand/soil 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.

10. The permit holder is authorized to accept mameno humus from Ajinomoto Heartland. The permit holder is authorized to use a mameno humus/soil combination as an alternative cover material, subject to the following:

a. The ratio of mameno humus to soil shall not exceed 50% mameno humus by volume. Quantities exceeding 1-week usage shall be disposed in the workface area. Only mameno humus placed at a ratio of 6:1 (6 tons of waste to 1 ton of approved mameno humus) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste. Pursuant to Iowa Code section 455B.310(9), mameno humus used by a sanitary landfill as daily cover is exempt from imposition of the tonnage fee if the mameno humus is generated by a facility located within the state and if the mameno humus is provided to the permit holder at no cost to the permit holder.

b. The mameno humus/soil may be used in lieu of the 6-inch daily cover requirement. Mameno humus /soil shall not be used as a substitute for intermediate or final soil cover.

c. The waste must be compacted, before the mameno humus/soil is applied, to provide an even surface to minimize ponding, prevent pockets, and to maximize uniform surface drainage

d. Mameno humus/soil 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, and rodents.

e. The soil ratio shall be increased, if necessary, to optimize cover performance relative to the criteria stated in items "c" and "d" above.

f. The permit holder shall scarify the mameno humus/soil 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.

g. The permit holder shall maintain in the landfill files appropriate **quarterly** laboratory analytical documentation that demonstrates that the pH of the mameno humus is not less than 4.0. Documentation reporting of such testing shall be submitted to both the DNR's Main and local Field office.

h. The use of mameno humus/soil for daily cover usage by any other generator than the one approved above shall be subject to specifications approval by the Department.

j. If the mameno humus/soil 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.

11. The permit holder is authorized to use Citric Precoat (Pre-LX) waste from the Cargill, Inc. facility in as follows:

a. Blended with soil as an alternative daily cover material. The maximum percentage of Citric Precoat in the daily cover blend shall not exceed 50% by volume. The Citric Precoat used as an alternative daily cover additive shall be blended with soil by the end of the day of receipt of the Citric Precoat. The Citric Precoat and soil mixture shall be stockpiled in an area close to the working face that will not interfere with disposal operations, as directed by the landfill supervisor. Any excess Citric Precoat that cannot be timely blended on the day of receipt shall be disposed of as waste. The Citric Precoat shall not be utilized for intermediate or final cover.

b. The Citric Precoat waste may also be used as a yard waste additive. The pH may need to be adjusted before use. The Citric Precoat waste utilized for this purpose shall be blended with the yard waste pile by the end of the working day of receipt of the Citric Precoat. The yard waste management requirements defined under Special Provision #7 apply.

c. The Citric Precoat waste shall be blended with soil as an alternative daily cover (not to exceed 50% Citric Precoat by volume) and the yard waste at rates that will not cause adverse environmental or operational difficulties or odor problems. Any adverse implications caused by the use of the Citric Precoat shall be immediately remedied by adjusting the rate of application or ultimately terminating the offending use.

d. Runoff from the alternative daily cover and yard waste stockpiles incorporating Citric Precoat waste shall be controlled to prevent the waste from being discharged off site.

e. The DNR confirmed that the Citric Precoat waste is not subject to Special Waste Authorization for disposal under letter to Daniel Taylor with Cargill, Inc. dated March 27, 1998.

12. The permit holder is authorized to use a geotextile by the trade name TYPAR:

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

13. 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.

14. 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.

15. The permit holder shall close the landfill site in accordance with the Closure Plan-Revised, dated December 10, 2014, the Post-Closure Care Plan, dated December 10, 2014, Closure Plan Response Letter, dated December 10, 2014, and replacement plan sheets received December 11, 2014, all prepared by Terracon Consultants, Inc.

    a. The Initial Waste Cell Capping Construction Documentation Report (Document No. 98898), dated November 9, 2020, as prepared by Terracon Consultants, Inc., is approved on November 16, 2020, and incorporated into the permit.

XI. Permit Renewal and Revision History

Date	Comment
7/6/2020	New Special Provision X.5 approving leachate recirculation and subsequent renumbering of provisions. New Special Provision X.11 approving the use of TYPAR and subsequent renumbering of provisions.
7/8/2020	New Special Provision X.5 approving the disposal of PCS and subsequent renumbering of provisions.
11/16/2020	X.7.d. Approves the Landfill Gas Lateral Construction Documentation Report. X.15.a. Approves the Initial Waste Cell Capping Construction Documentation Report.