February 24, 2022

MICHAEL MCCOY
METRO WASTE AUTHORITY
METRO PARK EAST LANDFILL
12181 12TH AVENUE NE
MITCHELLVILLE IA 50169-9802

Re: Metro Park West Landfill
Boone and Greene County Municipal Solid Waste Landfill (MSWLF) Units
Permit #08-SDP-03-84
Request for Permit Revision Regarding Leachate Recirculation (Document No. 102334)

Dear Mr. McCoy:

Enclosed is the revised permit for the Metro Park West Landfill. The revision allows for leachate recirculation over vegetated and non-vegetated intermediate cover areas.

The revised permit must be kept with the approved plans at the sanitary disposal project in accordance with the recordkeeping and reporting requirements of subparagraph 113.11(1). Please review this revision with your operators, as they must become familiar with it. Note that the permit contains conditions 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, please contact me at (515) 229-8356 or mike.smith@dnr.iowa.gov.

Sincerely,

Michael W. Smith
Digitally signed by Michael W. Smith
Date: 2022.02.24 13:52:45 -06'00'

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

copy: Art Kern
Metro Waste Authority
12181 12TH Avenue NE
Mitchellville IA 50169-9802

Jon Penheiter
Metro Waste Authority
12181 12TH Avenue NE
Mitchellville IA 50169-9802

DNR Field Office #5

Garrett Williams, P.E.
HDR Engineering, Inc.
1917 S 67th Street
Omaha, NE 68106-2973

IOWA DEPARTMENT OF NATURAL RESOURCES
SANITARY DISPOSAL PROJECT PERMIT

I.	**Permit Number:**	**08-SDP-03-84** Metro Park West Landfill
II.	**Permitted Agency:**	**Metro Waste Authority**
III.	**Project Location:**	Located within the southwest fractional quarter of the Section 31, Township 82 North, Range 28 West of Boone County, Iowa; Lot 14 of the South one-half of the southeastern one-quarter of Section 36, Township 82 North, Range 29 West of Greene County, Iowa; northeast fractional quarter of Section 1, Township 81 North, Range 29 West, and northwest fractional quarter of Section 6, Township 81 North, Range 28 West of Dallas County, Iowa; and Lot 1 of Parcel "C" in the North half of the Southwest Fractional Quarter of Section 31, Township 82 North, Range 28 West of the 5th P.M., Boone County, Iowa. The MPW Landfill is located approximately five miles northwest of Perry, Dallas County, Iowa.
IV.	**Responsible Official**	
	Name:	Michael McCoy, Executive Director
	Address:	Metro Waste Authority 300 East Locust Street Des Moines, IA 50309-1864
	Phone:	(515)-323-6535
	FAX:	(515)-244-9477
V.	**Licensed Design Engineer**	
	Name:	Garrett Williams, P.E.
	Address:	HDR 1917 S 67th Street Omaha, NE 68106
	Phone:	(402)-399-1210
	FAX:	(402) 399-1111
	Iowa License Number:	24856
VI.	**Date Permit Issued:**	**8/2/2021**
	Date Permit Revised:	**2/24/2022**
VII.	**Permit Expiration Date:**	**7/5/2026**

Michael W. Smith
Digitally signed by Michael W. Smith
Date: 2022.02.24 14:02:13 -06'00'

VIII. Issued by: _____
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.

[1] See rules published 12/11/02 and effective 1/15/03

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 area wide 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 Metro Waste Authority (MWA) Planning Area Comprehensive Plan. The Comprehensive Plan as approved by the DNR on September 22, 2020; 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 unincorporated area in Polk County; the Cities of Carlisle, Hartford, and Norwalk in Warren County; the cities of Adel, Dawson, Linden, Minburn, Perry, Redfield, and Waukee and the unincorporated area in Dallas County; the cities of Mingo and Prairie City in Jasper County; and the City of Jefferson in Greene County.

   The permit holder also accepts waste from the Prairie Solid Waste Agency's Transfer Station located in Union County and the Adair County Landfill and Recycling Center in accordance with 567-101.12(1)(455B).

[1] See rules published 12/11/02 and effective 1/15/03

In accordance with 567 IAC Chapter 111, Metro Waste Authority, as a participant in the Environmental Management System program, is not required to update its comprehensive plan.

2. The permit holder shall develop and operate the site in accordance with the 2021 Permit Renewal Application dated June 14 2021 (documents 100661, 100662, 100663, 100664, 100665, 100666, 100667, 100668), as submitted by HDR and hereby incorporated into the permit and the following:

   a. Waste disposal is limited to Cells A, B, and C. The site vertical height shall not exceed a maximum waste elevation of 1070 feet ASL as depicted on Sheet 03C-22 in Appendix 2B in the 2021 Permit Renewal Application, dated June 14, 2021. Cell D is approved for construction upon DNR approval of Construction Drawings and an updated Construction Quality Assurance Plan. Cell D shall be approved for waste disposal after DNR approval of the Construction Certification Report. Upon DNR approval of waste disposal in Cell D, the site vertical height shall not exceed a maximum waste elevation of 1084.5 feet ASL (final grade minus 3.5 feet for cover thickness) as depicted on Sheet 03C-23 in Appendix 2B in the 2021 Permit Renewal Application, dated June 14, 2021. Any further expansion shall require prior DNR approval.

   b. 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.

   c. 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 Perry 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.

[1] See rules published 12/11/02 and effective 1/15/03

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).

d. 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.

e. 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.

f. The permit holder is approved, on June 8, 2018, to initiate a pilot test in accordance with Leachate Volume Reduction System Pilot Test Permit Amendment Request, dated June 4, 2018, as submitted by Barker Lemar Engineering Consultants.

3. The permit holder is authorized to construct the liner and leachate collection system in accordance with the following:

a. The permit holder is not authorized to construct any new disposal cells until DNR approval of Construction Drawings and an updated Construction Quality Assurance Plan.

b. The permit holder shall notify the DNR and have the site inspected when the construction of a new Municipal Solid Waste Landfill Unit (MSWLF) unit or significant components thereof has been completed, in accordance with subrule 113.4(6). Prior to the inspection, the Quality Control & Assurance officer shall submit a final report to the DNR that verifies compliance with the requirements of rule 113.7 and the approved plans and specifications. No waste disposal shall commence in any newly constructed unit or portion thereof until it has been inspected and approved by the DNR.

c. The Construction Certification Report and Drawings dated April 15, 1999, as submitted by Barker, Lemar & Associates for the leachate storage lagoon and appurtenances, and approved on May 6, 1999; are incorporated into the permit.

[1] See rules published 12/11/02 and effective 1/15/03

d. The Construction Certification Report for the Groundwater Diversion Trench Plan, dated October 5, 2005, as submitted by Barker Lemar Engineering Consultants, approved on November 7, 2005 and pertaining to installation of groundwater diversion trenches, pumps, and associated plumbing along the northern and eastern perimeters of the eastern (Boone County) portion of the landfill, is incorporated into the permit.

e. The construction certification report entitled the Permit Amendment #6 Response, dated May 11, 2006, as submitted by Barker Lemar Engineering Consultants, approved on June 1, 2006 and related to the documentation of the bentonite backfilling of portions of the farm tile trench where solid waste was penetrated during tile rerouting, is incorporated into the permit.

f. The Leachate Piezometer Abandonment and Installation Documentation, dated July 26, 2007, which included the abandonment records for piezometers LPZ-1, LPZ-2, LPZ-3, LPZ-4, LPZ-5, LPZ-6, and LPZ-7, and the construction documents for LPZ-1R, LPZ-2R, LPZ-3R, LPZ-6R, and LPZ-7R, submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

g. The Construction Certification Report, West Half of Cell A Construction and West Slope Toe Drain Installation, dated September 26, 2007, submitted by Barker Lemar Engineering Consultants and approved on September 28, 2007, is incorporated into the permit.

h. The Construction Certification Report, P-32 Cell A East Liner & Leachate System, dated September 18, 2009, as submitted by Barker Lemar Engineering Consultants and approved on September 23, 2009, including the updated as-constructed plan sheets contained in Construction Certification Report - Addendum 2, dated May 20, 2010, also submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

i. Documentation regarding the installation of five geothermal wells near the scale building at the site, dated February 9, 2010, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

j. The Cell A Abutment and Leachate Storage Lagoon Liner Repair documentation, dated November 1, 2010, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

k. Construction rerouting of the agricultural drain tile monitored by AGT-1, dated January 18, 2011, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

[1] See rules published 12/11/02 and effective 1/15/03

l. The Construction Observation Report, P-36 Cell B liner and Leachate System, dated October 26, 2011, as submitted by Barker Lemar Engineering Consultants, is approved and incorporated into the permit.

m. The Construction Observation Report, P-43 Landfill Gas Collection System, dated July 31, 2014, submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

n. The Construction Quality Assurance Report, P49 Cell C Liner and Leachate System, dated July 24, 2015, provided by SCS Aquaterra is incorporated into the permit.

o. The Construction Documentation Report, Leachate System Improvements, dated April 26, 2016, prepared by Barker Lemar Engineering Consultants, is incorporated into the permit.

p. The Leachate Lagoon Modification and Lift Station L-4 Construction Documentation, dated May 6, 2016, prepared by Barker Lemar Engineering Consultants, is incorporated into the permit.

q. The Construction Documentation Report Leachate Lagoon Repair, dated June 3, 2016, prepared by Barker Lemar Engineering Consultants, is incorporated into the permit.

r. The Construction Documentation Report Leachate Lagoon Repair, dated August 24, 2020 (Document No. 98305), prepared by HDR, is incorporated into the permit.

4. Hydrologic monitoring at the site shall be conducted in accordance with the Hydrologic Monitoring System Plan, in Appendix 4 in the 2021 Permit Renewal Application, dated June 14, 2021, as submitted by HDR, and the following:

   a. The HMSP monitoring points for the Boone County MSWLF Unit, including the unlined area, Cell A West, Cell A East, Cell B and Cell C consists of background monitoring point MW-5AR and downgradient monitoring points MW-8R, MW-9B, MW-12, MW-13, MW-14, MW-16, GDE, GDW, and UD-B.

   b. 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 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 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.

[1] See rules published 12/11/02 and effective 1/15/03

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 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.

e. The permit holder may change the sampling frequency to allow for a five (5) year 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. 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.

f. 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. The report must contain an analysis of the groundwater underdrain on groundwater flow directions.

g. An assessment of corrective measures report is to be submitted by May 31, 2019.

h. The Monitoring Well Installation documentation for groundwater monitoring wells MW-12 and MW-13, and landfill gas monitoring point LFGW-W1, dated November 3, 2010, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

i. Construction rerouting of the agricultural drain tile monitored by AGT-1, dated January 18, 2011, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit. This monitoring point is no longer required to be monitored in accordance with the HMSP.

j. The well installation documentation for MW-14, MW-15, and MW-19, and abandonment documentation for MW-9A, dated November 17, 2011, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

k. The documentation report, Monitoring Well Installation, for monitoring wells MW-20, MW-21, MW-22, MW-23, MW-24, and MW-25, dated November 20, 2013, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

[1] See rules published 12/11/02 and effective 1/15/03

l. The documentation report, Monitoring Well Installation, for monitoring well MW-26, dated March 5, 2014, as submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

m. The reports Monitoring Well Installation & Abandonment dated May 29, 2015, and supplemental information provided by email dated, June 29, 2015, for installation of MW-16 and MW-27 and abandonment of MW-11 and MW-15, both submitted by Barker Lemar Engineering Consultants are incorporated into the permit.

n. The Permit Amendment Request – HMSP Monitoring Network, dated July 8, 2015, as submitted by Barker Lemar Engineering Consultants is incorporated into the permit. This provides approval to abandon monitoring well MW-19 in accordance with 567 Iowa Administrative Code 113.10(2)"d" and to include monitoring well MW-9B into the sampling network.

o. The abandonment of monitoring well MW-19, documented in Monitoring Well Abandonment, dated October 23, 2015, submitted by Barker Lemar Engineering Consultants, is incorporated into the permit.

p. The Request for Modification to the Statistical Method, dated May 2, 2016, prepared by Barker Lemar Engineering Consultants, to perform intrawell statistical comparisons at GDW and GDE is incorporated into the permit.

5. The permit holder is authorized to recirculate leachate in accordance with the Leachate Management Plan contained in Appendix 5B of the 2021 Permit Renewal Application, dated June 14, 2015, as submitted by HDR 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 may be applied to vegetated or non-vegetated intermediate cover. Leachate shall not be applied to final 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.

[1] See rules published 12/11/02 and effective 1/15/03

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.

6. The permit holder shall conduct subsurface gas monitoring in accordance with the Methane Migration Monitoring Plan contained in Appendix 8 of the 2021 Permit Renewal Application, dated June 14, 2021, as submitted by HDR, and hereby approved, 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).

7. The permit holder is allowed direct burial of untreated petroleum contaminated soil (PCS) into the working face in accordance with variance request, dated August 2, 2013, as prepared by Barker Lemar Engineering Consultants, for a period to coincide with the solid waste permit expiration date; 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).

[1] See rules published 12/11/02 and effective 1/15/03

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).

8. The permit holder is authorized to collect, process, grind, or chip trees, limbs, brush, and clean wood wastes free of coatings and preservatives, for the purposes of reuse as 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.

9. 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.

[1] See rules published 12/11/02 and effective 1/15/03

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.

10. The permit holder is authorized to use an alternative daily cover by the trade name ProGuard, ConCover, Posi-Shell, TopCoat, and/or Finn, 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.

[1] See rules published 12/11/02 and effective 1/15/03

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.

i. 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.

11. The permit holder is authorized to use a geotextile by the trade name *Typar*, a trade name geotextile manufactured by Exxon Chemical Company, or *Woven Polyolefin Fabric ™(L257)*, manufactured by FABRENE®, as an alternative cover material for the active MSWLF unit, subject to the following:

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

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

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

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

e. This product shall not be exposed for longer than **thirty (30)** 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

[1] See rules published 12/11/02 and effective 1/15/03

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.

12. The permit holder is authorized to use a homogeneous blended mixture of soil and compost rejects from the Metro Park East Sanitary Landfill composting operations as an alternative daily cover. The maximum percentage of compost rejects in the daily cover blend shall not exceed 50% by volume. The compost rejects/soil blend shall be stockpiled in an area close to the working face that will not interfere with disposal operations, as directed by the landfill manager. The compost rejects/soil blend may not be utilized for the placement of intermediate or final cover.

13. The permit holder is authorized to use a homogeneous blended mixture of soil and sandblast abrasive as an alternative daily cover, subject to the following:

    a. Within 14 days of acceptance of material from each differing source, the permit holder shall provide the DNR generator source documentation and current TCLP test results confirming compliance with nonhazardous criteria.

    b. The ratio of sandblast residue to soil shall not exceed 50% sandblast residue by volume. Quantities exceeding 1-week usage shall be disposed in the workface area. Only sandblast residue placed at a ratio of 6:1 (6 tons of waste to 1 ton of approved sandblast residue) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste.

    c. The alternative cover material may be used in lieu of the 6-inch daily cover requirement but it shall not be used as a substitute for intermediate or final soil cover.

    d. The waste must be compacted before the alternative cover material is applied to provide an even surface to minimize ponding and maximize uniform surface drainage.

    e. The alternative cover material 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.

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

    g. The permit holder shall scarify any alternative cover material prior to each day's use of that area as a working face.

[1] See rules published 12/11/02 and effective 1/15/03

h. The permit holder shall maintain in the landfill files appropriate quarterly laboratory analytical documentation that demonstrates that the sandblast residue is not hazardous by TCLP testing. Documentation reporting of such testing shall be submitted to both the DNR's Main and local Field Office.

14. The permit holder is authorized to accept foundry sand, used only for iron casting, from the Progressive Foundry facility in Perry, 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 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. The permit holder shall maintain in the landfill files appropriate 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, flouride, lead, lithium, manganese, mercury,

[1] See rules published 12/11/02 and effective 1/15/03

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. 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.

15. The permit holder is authorized to use an alternative intermediate cover, by the trade name *ConCover SW*, as a substitute for the one-foot intermediate soil cover requirement. Use of this material is subject to the following:

a. All landfill operations personnel shall be trained by the 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, or demonstrated component blends that provide superior performance.

b. 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.

c. This product shall be applied and cross applied in a manner to control fire or fire hazards, blowing litter, odors, insects, rodents, birds and other vectors. Additional product shall be applied whenever necessary to provide effective cover.

d. If this product does not set within **90 minutes** of application, it shall be covered with one foot of compacted soil or a fresh application of this product. The term set means to 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 **60 days**. After 60 days, any area with this product exposed shall be either covered with a new lift of waste, a fresh application of this product, or one foot of compacted soil.

e. 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 the material must be suspended until proper corrections are made by the operator, with one foot of compacted intermediate cover being utilized during this interim period.

f. The operator shall ensure that the product is prepared according to the manufacturer's nominal slurry mix specifications, or demonstrated component blends that provide superior performance.

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 the requirements of numbered subparagraph 113.8(2)"f"(2). The permit holder shall immediately notify the DNR's Main and local Field offices through both written and

[1] See rules published 12/11/02 and effective 1/15/03

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.

i. 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.

j. The permit holder is authorized to use leachate as the solution mix for the product subject to the following conditions:

1) The quantity of leachate used in the solution mix shall be recorded each time the product is utilized as a daily cover alternative and reported in the LCSPER.

2) Runoff of leachate or the leachate solution mix shall be prohibited.

3) The permit holder shall revert to clean water as the solution mix if the DNR or the permit holder deems the leachate solution mix to be ineffective.

16. The permit holder is authorized to accept wood chips. The permit holder is also authorized to use crushed railroad ties (already onsite) and/or wood chips with soil combination as an alternative cover material, subject to the following:

a. The ratio of wood to soil shall not exceed 50% wood by volume. Only wood placed at a ratio of 6:1 (6 tons of waste to 1 ton of approved wood) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste.

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

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

d. The wood/soil combination 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.

[1] See rules published 12/11/02 and effective 1/15/03

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 wood/soil combination 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 use of wood/soil combination 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 wood/soil combination 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.

17. The permit holder is authorized to accept, temporarily store, process, reuse or dispose of roofing shingles in accordance with the following conditions:

a. All temporary storage, grinding and disposal operations shall be conducted within the permitted facility boundaries in the area designated for such activities. Shingle loads which are determined to be Asbestos Containing Material (ACM) shall be managed and disposed of in accordance with 567-Chapter 109 and DNR Air Quality Bureau. Sampling and testing for ACM shall be in accordance with DNR Air Quality Bureau.

b. Alternative daily cover reuse of ground shingles is authorized on the condition that only shingles with asbestos content of 1% or less shall be reused as an admixture for alternative cover material. The shingles shall be ground to an average size of 3 inches or less and the ground material shall be blended on a 50% by volume basis with soil and be used only for daily cover operations. Only shingles placed at a ratio of 6:1 (6 tons of waste to 1 ton of approved shingles) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste.

c. The permit holder shall scarify the shingles/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.

d. Pursuant to IAC 567-108.4(2), roadway reuse of ground shingles at the facility is authorized on the condition that only shingles with asbestos content of 1% or less shall be used for roadway dust control, roadway subbase, and pavement admixture applications. Such uses are considered a “universally approved” beneficial use in accordance with IAC 567-Chapter 108 and not disposal. Excessive or overuse of shingles for these purposes as determined by the DNR may constitute disposal and be subject to the statewide tonnage fee.

18. 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

[1] See rules published 12/11/02 and effective 1/15/03

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.

19. The permit holder is authorized to collect and temporarily store used oil for recycling purposes. The storage tank(s) shall be designed and maintained to prevent the spillage or discharge of used oil. Absorbent material shall be available at the tank site for use by the operator to control used oil spillage or discharge. The used oil shall be processed in accordance with IAC 567 Chapter 119. The maximum length of time for storage is twelve (12) months.

20. The permit holder is authorized to accept and temporarily store antifreeze for recycling purposes. The antifreeze shall be stored in plastic drums at a location designated by the operator. Absorbent material shall be available for use by the operator to control antifreeze spillage or discharge. The plastic drums shall be placed in a spill control pan of a capacity sufficient to contain the contents of the largest drum with all drums in place in the control pan. The maximum length of time for storage is twelve (12) months.

21. The permit holder is authorized to accept and temporarily store LP tanks for reuse purposes in an area designated by the operator. The storage area for the tanks shall be kept in an orderly fashion. The maximum length of time for storage is twelve (12) months.

22. 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.

23. The permit holder is authorized to accept and temporarily store lead acid batteries for recycling purposes. Lead acid batteries must be stored in a designated area which will curtail movement of acids and provide proper ventilation of gases from the batteries. The maximum length of time for storage is twelve (12) months.

24. The permit holder is authorized to collect and temporarily store rigid recyclable wastes (e.g., metal cans, glass bottles and plastic bottles) and fiber recyclable wastes (e.g., magazines, catalogs, books, envelopes and paper) in segregated recycling boxes located near the landfill entrance. The following conditions and procedures shall apply:

    a. The recyclables shall not be stored for a period exceeding six (6) months.

[1] See rules published 12/11/02 and effective 1/15/03

b. The recycle boxes shall be fitted with lids to prevent precipitation entry and to control litter.

c. Separate boxes should be provided to segregate metals and plastics to facilitate recycling recovery.

d. Recycling boxes shall be labeled to facilitate public use.

e. Records shall be maintained to document amounts of waste recycled for quarterly Solid Waste Fee reporting and the dates that each box content is removed from the site for recycling to confirm storage time limitations.

f. Recycling activities shall be monitored to insure that no other disposable wastes are stored in recycle boxes.

g. Farm chemical containers shall not be stored in recycling boxes. Separate authorization for this purpose shall be secured by permit amendment.

25. The permit holder is authorized to accept and temporarily store wood pallets and clean wood wastes free of coatings and preservatives for reuse purposes. The maximum length of time for storage is twelve (12) months.

26. The permit holder is authorized to land apply Bio-Solids in accordance with criteria established in 567—67 , the current operations plan and in compliance with the NPDES permit requirements of the generator.

27. The Closure/Post-Closure Plan contained in Appendix 9 of the 2021 Permit Renewal Application, dated June 14, 2021, as submitted by HDR is approved. The closure of the landfill site shall be in accordance with the plan and the following:

a. The Landfill Closure Observation Report documenting final cover construction on 14 acres of the unlined portion of the Boone County MSWLF Unit, dated January 5, 2010, as submitted by Barker Lemar Engineering Consultants, including the updated as-constructed plan sheets contained in the Landfill Closure Observation Report - Addendum 1, dated May 20, 2010, also submitted by Barker Lemar Engineering Consultants, is incorporated into the permit. Final cover has been placed over the entirety of the unlined portion of the Boone County MSWLF unit, through the final cover construction described in this report and the Cell A abutment liner described in Special Provisions 3g and h.

b. 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.

[1] See rules published 12/11/02 and effective 1/15/03

[1] See rules published 12/11/02 and effective 1/15/03

XI. Special Provisions- Closed Units

1. The thirty-year post closure period for the closed Greene County MSWLF unit began on August 30, 2004.

2. The closed Greene County MSWLF unit shall be maintained in accordance with the: **1)** Closure/Postclosure Plan, dated April 21, 1995, and revised July 27, 1995 and August 1996, as submitted by Howard R. Green Company and approved on September 11, 1996; **2)** 1998 Horizontal Expansion Plans and Report, dated March 1, 1999, and certified May 4, 1999, as submitted by Barker, Lemar & Associates and approved on May 6, 1999; and **3)** Closure/Post Closure Plan Addendum dated July 11, 2003, as prepared by Barker Lemar Engineering Consultants and approved on August 27, 2003.

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

4. The Construction Certification Report dated July 30, 2004, related to the capping of the Greene County Fill Area, submitted by Barker Lemar Engineering Consultants, and approved on August 30, 2004; is incorporated into the permit.

5. Hydrologic monitoring for the closed Greene County MSWLF unit shall be conducted as follows:

    a. The permit holder shall implement the Hydrologic Monitoring System Plan for the Greene County site contained in Appendix 4B of the 2021 Permit Renewal Application, dated June 14, 2021, as submitted by HDR.

    b. The monitoring shall include background groundwater monitoring points MW-6A and MW-28; and downgradient monitoring points MW-1, MW-2AR, and MW-3. Monitoring Well MW-2BR will be sampled only for total arsenic and total suspended solids. Monitoring Well MW-6B shall be retained for water level measurements.

    c. Routine semiannual water quality sampling from the approved monitoring points shall consist of the following:
        1. Chloride.
        2. Specific conductance (field measurement).
        3. pH (field measurement).
        4. Ammonia nitrogen.
        5. Iron, dissolved.
        6. Chemical oxygen demand.
        7. Any additional parameters deemed necessary by the DNR.

[1] See rules published 12/11/02 and effective 1/15/03

Routine annual water quality sampling from approved monitoring points shall consist of the following:

1. Total organic halogen.
2. Phenols.
3. Any additional parameters deemed necessary by the DNR.

d. The documentation forms for the construction of monitoring points MW-2AR, as attached to the January 21, 1994 correspondence from Terracon Environmental, Inc., are incorporated into the permit.

e. The documentation forms for the construction of monitoring points MW-6A and MW-6B, as attached to the May 13, 1996 correspondence from Barker Environmental Service, are incorporated into the permit.

f. The construction documentation forms for monitoring point MW-2BR, as attached to the May 3, 1999, correspondence from Barker, Lemar & Associates, are incorporated into the permit.

g. Samples collected for dissolved metals analysis shall be field filtered, preserved, and promptly transferred to a certified laboratory.

h. If the analytical results for a downgradient groundwater monitoring point do not fall within the control limits of two standard deviations above (or below for pH) the mean parameters, listed in “c” above for a corresponding upgradient groundwater monitoring point and it cannot be demonstrated that a source other than an MSWLF unit caused the control limit exceedance, then the owner or operator shall comply with the groundwater assessment monitoring program requirements pursuant to subrule 113.10(6) and corrective action requirements pursuant to subrules 113.10(7), 113.10(8) and 113.10(9), if necessary.

i. In accordance with the variance granted on January 17, 2012, the permit holder is required to perform maintenance and performance reevaluation of the Greene County MSWLF Unit monitoring well network in accordance with paragraph 113.10(2)”f”.

j. The permit holder may change the sampling frequency to allow for a five (5) year 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. 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.

[1] See rules published 12/11/02 and effective 1/15/03

k. The measurement of Total suspended solids shall be added to any assessment monitoring and 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.

l. The AWQR summarizing the effects the facility is having on groundwater quality shall be submitted to the DNR's Solid Waste Section by January 31 of each year. This report shall be prepared in accordance with subparagraphs 113.26(8)d(2-4)[1] by a professional engineer licensed in the state of Iowa and shall include the results of groundwater level measurements.

m. In accordance with the request contained in the 2011 AWQR, monitoring wells MW-7AR and MW-7BR are removed from the Greene County MSWLF unit monitoring network but are retained in the HMSP as water level monitoring points.

n. The Monitoring Well and Subsurface Monitoring Probe Installation, dated November 20, 2017, is incorporated into the permit (installation of MW-28 and LFGW-W2)

o. An assessment of corrective measures report is to be submitted by May 31, 2019.

6. The closed Greene County MSWLF Unit shall be inspected on a semiannual basis. Semiannual reports based upon these inspections, prepared by a professional engineer licensed in the state of Iowa, shall be submitted that describe the site's conformance and nonconformance with the permit and the approved plans and specifications. These reports shall be submitted by April 30 and October 31 each year for the preceding six-month period to the Main office of the DNR.

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

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

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

10. The permit holder shall conduct subsurface gas monitoring in accordance with the Methane Migration Monitoring Plan contained in Appendix 8A of the 2021 Permit Renewal Application, dated June 14, 2021, as submitted by HDR, and the following:

[1] See rules published 12/11/02 and effective 1/15/03

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).

11. The permit holder is authorized to construct and operate the leachate control system in accordance with the Leachate Control Plan (LCP) dated March 21, 1996, the LCP supporting report dated March 18, 1996, and the revisions submitted in the letter dated March 20, 1996, from Barker Environmental Service, all as approved on April 11, 1996; the 1998 Horizontal Expansion Plans and Report, dated March 1, 1999, and certified May 4, 1999, as submitted by Barker, Lemar & Associates and approved on May 6, 1999; and the following:

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

b. The leachate control system shall be operated and maintained in accordance with the approved permit documents. The permit holder shall routinely collect the necessary information and evaluate the effectiveness of the system in controlling the leachate. All documentation shall be summarized in a Leachate Control System Performance Evaluation (LCSPE) Report. Effective control 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.

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

[1] See rules published 12/11/02 and effective 1/15/03

d. The permit holder shall annually submit the LCSPE Report, including record data, as a supplement to the Annual Water Quality Report, as required by paragraph 113.26(8)d[1]. The performance evaluation shall include proposed additional leachate control measures and an implementation schedule in the event that the constructed system is not performing effectively.

e. The Construction Certification Report and Drawings dated April 15, 1999, as submitted by Barker, Lemar & Associates for the leachate toe drain and storage lagoon and approved on May 6, 1999, are incorporated into the permit.

[1] See rules published 12/11/02 and effective 1/15/03

XII. Permit Renewal and Revision History

Date	Comment
8/2/2021	Permit Renewed
2/24/2022	X5.d. - Leachate may be applied to to vegetated or non-vegetated intermediate cover.

[1] See rules published 12/11/02 and effective 1/15/03