

January 16, 2025

BRANDI MERICLE  
CASS COUNTY ENVIRONMENTAL CONTROL AGENCY  
65928 JACKSON RD  
ATLANTIC IA 50022

**RE: Cass County Sanitary Landfill  
Request - Closure Permit Revision (Doc [#111787](#))  
15-SDP-01-75P**

Dear Ms. Mericle:

Enclosed is the revised closure permit for the Cass County Sanitary Landfill. The permit and the approved plans must be kept at the sanitary disposal project in accordance with subparagraph [113.11\(1\)"a"](#). Please review the permit with your operators, as they must become familiar with it.

The revision approves the requested changes to the leachate head level measurement frequencies, dated January 10, 2025, as submitted by HLW Engineering Group.

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

For any questions please contact me at [\(515\) 587-7638](tel:5155877638) or [geoffrey.spain@dnr.iowa.gov](mailto:geoffrey.spain@dnr.iowa.gov).

Sincerely,

Geoffrey Spain  
Environmental Engineer  
Land Quality Bureau

cc: Christine L. Collier, P.E.  
Senior Project Manager  
SCS Engineers  
1690 All-State Court, Suite 100  
West Des Moines, IA 50265

Douglas J. Luzbetak, P.E.  
HLW Engineering Group  
204 West Broad Street  
P.O. Box 314  
Story City, IA 50248

DNR Field Office #4, Atlantic

I.	<b>Permit Number:</b>	15-SDP-01-75C
II.	<b>Permitted Agency:</b>	Cass County Environmental Control Agency
III.	<b>Project Location:</b>	The NE ¼, SE ¼, SE ¼ , and Lot 4 in SE ¼, SE ¼, NE ¼; SE ¼, and all that part E ½, SE ¼; NE ¼ lying South of the creek, also that part of Lot 1 of Lot 5 lying North and East of the public highway in SE ¼, Section 13, Township 76 North, Range 36 West; and N ½, SW FR ¼, Section 18, Township 76 North, Range 35 West in Cass County, Iowa.
IV.	<b>Responsible Official</b>	
	Name:	Brandi Mericle, Director
	Address:	65928 Jackson Road Atlantic, IA 50022
	Phone:	712-243-1991
	Email:	casscountylandfill@gmail.com
V.	<b>Licensed Design Engineer</b>	
	Name:	Christine L. Collier, P.E., SCS Engineers
	Address:	1690 All-State Court, Suite 100 West Des Moines, IA 50265
	Phone:	515-418-0677
	Email:	ccollier@scsengineers.com
	License Number:	17963
VI.	<b>Date Permit Issued:</b>	<b>12/05/2023</b>
	<b>Date Permit Revised:</b>	<b>01/16/2025    Amendment #4</b>
VII.	<b>Permit Expiration Date:</b>	<b>12/05/2053</b>
VIII.	<b>Issued by:</b>	_____
		Environmental Services Division for the Director

**IX. General Provisions**

The above named permitted agency is hereby authorized to close the sanitary landfill at the described location in conformance with Chapter 455B of the Code, the rules pursuant thereto existing at the time of issuance, 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 closure and maintenance of this closed sanitary disposal project.

No legal or financial responsibility arising from the closure and post closure 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 rule 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 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 1<sup>st</sup>, annually, pursuant to rule 113.14. 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.

This facility shall be surveyed as necessary and inspected as described in the special provisions of this permit. Semiannual reports shall be prepared containing a brief report describing the site's conformance and nonconformance with the permit and the approved plans and specifications during the inspections. These reports shall be submitted by April 30

and October 31 each year for the preceeding six-month period to both the Field and Main offices of the DNR.

Failure to comply with Chapter 455B of the Code, or any rule of order promulgated pursuant thereto, or any or all provisions of this permit may result in a civil penalty of up to \$5000 for each day of violation, pursuant to Section 455B.307 of the Code.

#### **X. Special Provisions**

1. The thirty-year closure and post closure period for this facility begins on the date of issuance of this Closure Permit.
2. This site shall be closed and maintained in accordance with the approved Closure and Post Closure Plan as submitted by SCS Engineers dated May 16, 2023.
3. Issuance of this closure permit prohibits any additional waste disposal, recycling, composting, and other related landfill activities unless they are specifically approved through an amendment to this permit.
4. The permit holder submitted a closure compliance report certified by a professional engineer licensed in the State of Iowa.
  - a. Documentation that the surveys required in 113.8(2)"a"(1) and (3) have been completed.
  - b. The Construction Quality Assurance Report for the Final Cover, dated December 5, 2023, as submitted by SCS Engineers, is approved and included in the permit documents.
  - c. To properly address 567 Iowa Administrative Code 113.12(9), the notation on the deed will be satisfied by completing an environmental covenant. Please complete this by June 13, 2024.
5. Hydrologic monitoring at the site shall be conducted in accordance with the approved Hydrologic Monitoring System Plan (HMSP), as contained in Appendix 9 of the Permit Renewal Application, dated March 21, 2016 and revised on August 8, 2016 and October 12, 2016; as submitted by Barker Lemar Engineering Consultants; and the following:
  - a. The HMSP shall include background monitoring points MW-15R (water table) and MW-22 (sandstone); compliance monitoring points MW-11, MW-12, MW-19, MW-20, MW-21, MW-23, MW-36, MW-37, MW-38 and MW-39; and groundwater underdrain outlets UD-0 and UD-1.
  - b. Groundwater monitoring points not used for compliance monitoring may be retained as water level measuring points.

- a. 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 conduct background and routine semiannual groundwater sampling and analysis; as well as perform statistical tests for the approved monitoring points for Appendix I and total suspended solids (TSS) in accordance with rule 113.10(455B). Groundwater samples shall **not** be field-filtered prior to laboratory analysis and total suspended solids shall be analyzed using Method 1376585, with a reporting limit goal of  $\leq 2$  mg/l. Turbidity measurement may be approved by the DNR in lieu of TSS, provided a correlation between the two is established.
  - e. 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.
  - f. The permit holder shall collect semiannual groundwater elevation measurements from GWPZ-1 in order to measure the separation of the base of the MSWLF unit from the groundwater table as required in paragraph 113.6(2)"i". These data shall be included in the facilities' AWQR.
  - b. The permit holder shall submit the results of the semiannual sampling events within 45 days of receiving the results from the laboratory.
  - c. 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".
  - d. The Request for Modification of the HSMP, requesting the use of no-purge sample collection methods as appropriate, dated October 2, 2024, as submitted by HLW Engineering Group, is approved and included in the permit documents.
6. This site shall be inspected monthly for the first year. The frequency of routine inspections may be decreased, after the first year, but no less frequent than semiannually, if the permit holder provides justification that monthly inspections are no longer necessary to ensure proper maintenance of the site. Summarize all inspection data in the semiannual report defined in the General Provisions.
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 quarterly monitor and annually report site methane concentrations pursuant to paragraph 113.9. Specific actions, as defined in the rules, shall be taken in the event of methane gas level limit exceedances.

The annual report summarizing the methane gas monitoring results and any action taken resulting from gas levels exceeding the specified limits during the previous 12 months shall be submitted to the DNR's Main and local Field offices by November 30 of each year.

11. The permit holder is authorized to operate the leachate control system in accordance with the Leachate Recirculation permit amendment request dated January 27, 2012, as submitted by Barker Lemar Engineering Consultants, and the following:
  - a. The site will no longer be recirculating leachate. 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 Atlantic and city of Corning 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. After implementation of the leachate control system, the permit holder shall routinely collect the necessary information and evaluate the effectiveness of the system in controlling the leachate. All documentation shall be summarized in a Leachate Control System Performance Evaluation (LCSPE) Report.

Effectiveness on the lined areas shall be defined as maintaining 12 inches or less of leachate head above the MSWLF unit liner and maintaining and maintaining surface and groundwater quality standards at compliance monitoring points.

Effective control of leachate in unlined portion of the MSWLF unit 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 piezometers LPZ-0, LPZ-1, and LPZ-2, and quarterly at piezometers PZ-1R, PZ-2, PZ-3R, PZ-4, and PZ-5R, with 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.
  - e. The permit holder shall annually submit the LCSPE Report, including record data, as a supplement to the facility Annual Water Quality Report, as required by paragraph 113.7(5)"b"(14). 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.
  - f. The Certification Report for the Leachate Lagoon FML Repair, dated July 29, 2024, as submitted by HLW Engineering Group, is approved and included in the permit documents.
12. Based on a completed and certified site risk assessment meeting the requirements outlined in Iowa Code section 455B.305(6), the permit holder was conditionally exempted under the DNR letter dated September 21, 1995 from providing and implementing a leachate control plan for the unlined area that received wastes prior to July 1, 1992.
- Continued exemption is subject to control of leachate at the site and compliance with the groundwater sampling and analysis requirements pursuant to subrule 113.10(4). In the event that these conditions are violated, the permit holder shall be required to comply with the environmental corrective action requirements pursuant to rule 113.10(455B).
13. 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 any significant changes in facility closure operations that require modification of the currently approved ERRAP.
14. The waiver request to set aside remaining funds to fully fund post-closure over 10 years following the issuance of the landfill closure permit, dated March 11, 2024, as submitted by SCS Engineers, is approved and included into the permit documents (Doc #109494). The permit holder shall provide continuous financial assurance for site post-closure and corrective action in accordance with 567-113.14(455B). The permit holder shall submit proof of compliance annually, by April 1<sup>st</sup>, confirming that all applicable financial assurance documents are updated as required.

15. The Environmental Covenant, along with the Property Interest Form, for the Cass County Environmental Control Agency, recorded with Cass County and dated October 24, 2024, as submitted by Cass County Landfill, is approved and included in the permit documents.

**XI. Permit Revision History**

Date	Comment
05/14/2024	Special Provision "X.14" was added to approve a waiver for financial assurance.
09/13/2024	Special Provision "X.11.e" - Approval of FML Repair Certification Report.
10/31/2024	Special Provision "X.15" - Approval of Environmental Covenant
10/31/2024	Special Provison "X.5.d" - Approval of No-Purge Sample Collection HMSP Modification
01/16/2025	Special Provison "X.11.c" – Revision of leachate head level measurement frequency