

April 23, 2025

DJ LUHRS
DIRECTOR
ADAIR COUNTY SANITARY LANDFILL & RECYCLING CENTER
1645 STATE HIGHWAY 25
MENLO IA 50164

Re: Adair County Sanitary Landfill
Permit #01-SDP-01-74C
Permit Amendment No. 6

Mr. Luhrs:

Enclosed is Amendment #13 to the permit issued on February 28, 2013, for the Adair County Sanitary Landfill. The amendment and approved plans must be kept with the permit and the approved plans at the sanitary disposal project. Please review this amendment with your operators, as they must become familiar with it.

The amendment added a new special provision, which requires the preparation and submittal of a Post-Closure Reduction/Termination Plan no later than May 7, 2033. Please refer to Special Provision X.13 of your permit and the associated guidance and webinar on our webpage for additional information.

The permit and the approved plans must be kept at the sanitary disposal project in accordance with Iowa Administrative Code 567 subparagraph 113.11(1) (567 IAC 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 the DNR.

If you have any questions or need further information please feel free to contact me at [515-415-1331](tel:515-415-1331) or by email at brad.davison@dnr.iowa.gov.

Sincerely,



Digitally signed by
Bradley Davison
Date: 2025.04.22
11:10:59 -05'00'


Brad Davison
Environmental Specialist
Land Quality Bureau

cc: Nathan Ohrt
SCS Engineers
1690 All-State Court, Suite 100
West Des Moines, IA 50265
NOhrt@scsengineers.com

Iowa DNR Field Office #4, Atlantic
jessica.montana@dnr.iowa.gov

**IOWA DEPARTMENT OF NATURAL RESOURCES
SANITARY DISPOSAL PROJECT CLOSURE PERMIT**

- I. Permit Number:** 01-SDP-01-74C
- II. Permitted Agency:** Adair County Sanitary Landfill and Recycling Center Commission
- III. Project Location:** S ½ of the NE ¼ and all of the SE ¼ of Section 6, Township 76 North, Range 31 West in Adair County, Iowa
- IV. Responsible Official**
- Name: DJ Luhrs Director
Address: Adair County Sanitary Landfill & Recycling Center
1645 State Highway #25
Menlo, IA 50164
Phone: 641-743-8343
- V. Licensed Design Engineer**
- Name: Christine L. Collier, P.E.
Address: SCS Engineers
8450 Hickman Road, Suite 27
Clive, Iowa 50325
Phone: 515-631-6160
Fax: 913-681-0012

License Number: 17963
- VI. Date Permit Issued:** February 28, 2013
Date Permit Revised: April 22, 2025 **(Amendment #6)**
- VII. Permit Expiration Date:** February 28, 2043
- VIII. Issued by:**  Digitally signed by
Bradley Davison
Date: 2025.04.22 11:35:50
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- 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 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 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 due to the issuance of this permit.

If title to this project is transferred, the new owner must apply to the Department for a transfer of this permit within thirty days of the date of title transfer pursuant to rule 113.9. This permit is void sixty days after the date of title transfer unless the Department 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 1st, 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 Department.

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, included in Appendix 11 of the Permit Renewal Application, dated September 14, 2009 as submitted by Barker Lemar Engineering Consultants, and approved on June 2, 2011.
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. Site closure has been completed in compliance with rule 113.12 and the Closure and Post Closure Plan as documented in the following reports:
 - a. The Closure Observation Report, dated December 24, 2009, as submitted by Barker Lemar Engineering Consultants and approved on January 27, 2010, is incorporated as part of the permit documents. The final cover was constructed over the unlined area at the site.
 - b. The deed notice and survey documentation as required by 113.12(9) and 113.8(2)"a"(1) and (3), submitted October 24, 2012, as prepared by Barker Lemar Engineering Consultants and approved November 13, 2012, are incorporated into the permit documents.
 - c. The Construction Observation Report 2012 Landfill Closure, dated November 30, 2012, as submitted by Barker Lemar Engineering Consultants and approved on February 28, 2013, is incorporated as part of the permit documents.
5. This site shall be monitored for water quality in accordance with the hereby approved Revised Hydrologic Monitoring System Plan (HMSP) dated September 14, 2020, as submitted by SCS Engineers (Amendment #5), and the following:
 - a. The HMSP shall include groundwater monitoring points MW-2, MW-3, MW-6, MW-7, MW-9, MW-10 and groundwater underdrain point GWD-1 and leachate lagoon underdrain point GU-2.

- b. Groundwater monitoring points may be retained as water level measuring points.
 - c. Department construction documentation form 542-1277 and boring logs for all monitoring wells and piezometers shall be submitted within 30 days of installation. Department 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 in accordance with rule 113.10(455B). Groundwater samples shall **not** be field-filtered prior to laboratory analysis.
 - e. An alternative full Appendix II resample frequency for those wells currently in assessment monitoring is established at 5 years. The next Appendix II resampling event for those wells currently in assessment monitoring shall take place in Spring 2021 for monitoring point MW-2, and Spring 2022 for monitoring point MW-7. For monitoring points that are currently in detection monitoring, if a statistically significant increase over background is encountered the permit holder shall conduct at least two annual full Appendix II sample analysis events before requesting an alternative frequency. (Amendment #5)
 - f. The permit holder shall measure groundwater elevations within 1/100 of a foot in each well and immediately prior to purging, each time groundwater is sampled.
 - g. The permit holder shall submit the results of the routine semiannual sampling events within 45 days of receiving the results from the laboratory.
 - h. An Annual Water Quality Report (AWQR) summarizing the effects the facility is having on groundwater quality shall be submitted to the Department'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".
6. The permit holder shall conduct subsurface gas monitoring in accordance with the Revised Landfill Gas Monitoring Plan, dated September 5, 2008, as submitted by Barker Lemar Engineering Consultants, and approved on December 31, 2008, 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 shall maintain and operate the leachate collection system in accordance with subparagraph 113.8(3)"i", 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 Greenfield publicly owned treatment works (POTW). If the discharge is to a POTW with a pretreatment program approved by the Department, 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 Department's Wastewater Section. Copies of the local permit or treatment agreement shall be provided to the Department'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.
 - c. 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.
 - d. 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.
 - e. 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.

- f. 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 113.26(8)d. 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.
- g. Based on a completed and certified risk assessment meeting the requirements outlined in Iowa Code section 455B.305(6), the permit holder was conditionally exempted under the Department letter dated September 21, 1995 from providing and implementing a leachate control plan for the unlined waste disposal area that received wastes prior to July 1, 1992.

Continue 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).

- h. The 2014 Construction Documentation for the *Leachate Seep Repair Plan (Revision #1)*, dated December 3, 2014, as submitted by Barker Lemar Engineering Consultants, and approved on November 2, 2015, is incorporated as part of the permit documents. (Amendment #3, updates Amendment #2)

The leachate collection trench was constructed to address a leachate seep in the closed unlined landfill unit adjacent to the east side of the closed Phase 1 Cell as shown on Figure 1 as attached to the August 8, 2014 plan submittal.

The permit holder shall provide an update in future semiannual inspection reports on the effect the repair has had on mitigating further seeps from the noted area, accordingly.

- 8. 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.

In accordance with the *Request for Modification* contained in the *2018 Spring Semi-Annual Inspection Report*, dated April 30, 2018, as submitted by SCS Engineers, the permit holder is hereby approved to reduce the frequency of site inspections from quarterly to semi-annually. (Amendment #4, revises Amendment #1)

9. 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.
10. 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.
11. 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.
12. The permit holder shall follow the approved Emergency Response and Remedial Action Plan (ERRAP) procedures during all emergencies pursuant to subrule 113.30. 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.
13. By February 28, 2038, the permit holder shall submit a Post-Closure Care Reduction/Termination Plan. This plan shall include a description of activities that the permit holder shall conduct during the remaining term of the permit to demonstrate that leachate and groundwater quality, landfill gas, and final cover can be safely managed by alternatives to the permit such as an environmental covenant. In the absence of an approvable demonstration, the closure permit will be extended as necessary to allow for additional activities to support an approvable demonstration.

XI. Permit Revision History

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