

August 30, 2024

MARSHA MITCHELL  
RATHBUN AREA SOLID WASTE MANAGEMENT COMMISSION  
2642 HIGHWAY J46  
CORYDON IA 50060

**RE: Appanoose County Sanitary Landfill**  
**Permit No. 04-SDP-01-76C**  
**Monitoring Well Construction Form (Document No. [110604](#))**  
**Permit Revision Request for New Monitoring Well MW-60**

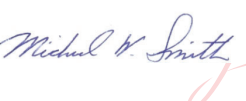
Dear Marsha Mitchell:

The Iowa Department of Natural Resources (DNR) has reviewed the Monitoring Well Construction Form, dated July 29, 2024, as submitted by Hall Engineering Company. The DNR revised the permit to approve the change in the hydrologic monitoring system plan.

Enclosed is a revised permit. The permit must be kept at the sanitary disposal project in accordance with paragraph [113.11\(1\)"a"](#). Please review this revision with your operators, as they must become familiar with it.

If you have any questions or comments, please contact me at 515-229-8356.

Sincerely,

 Digitally signed by  
Michael W. Smith  
Date: 2024.08.30  
09:29:49 -05'00'

Michael W. Smith, P.E.  
Environmental Engineer Senior  
Land Quality Bureau

copy: Bill Buss, P.E.  
Hall Engineering Company  
P.O. Box 825  
Alliant Building Suite 101  
300 Sheridan Avenue  
Centerville, IA 52544

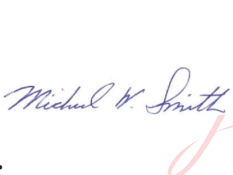
Hannah Dubbs  
Foth  
8191 Birchwood Court, Suite L  
Johnston, IA 50131

Denise Matherly  
Rathbun Area Solid Waste Commission  
3020 McCarty Street  
Centerville, Iowa 52544

Dane Blozovich, Director  
Rathbun Area Solid Waste Commission  
3020 McCarty Street  
Centerville, Iowa 52544

DNR Field Office #5

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

- I.           **Permit Number:**           04-SDP-01-76C  
Appanoose County Sanitary Landfill
- II.           **Permitted Agency:**       Rathbun Area Solid Waste Management Commission
- III.           **Project Location:**       The NE¼, NW¼ and a portion or portions of the NW¼, NW¼; the NW¼, NE¼; the SE¼, NW¼; the SW¼, NW¼, [except for a county road easement on the west side and except for approximately a 200' (E-W) by 580' (N-S) area in the east half of this parcel]; the S½, NE¼; and the N½, SE¼, all in Section 27, T68N, R18W, Appanoose County, Iowa. The permit holder obtained an easement in 1998 for an area roughly situated between the old and operating fill areas. (Street Address – 26260 195<sup>th</sup> Avenue)
- IV.           **Responsible Official**
- Name:                   Marsha Mitchell, Chairperson  
                  Address:               Rathbun Area Solid Waste Management Commission  
  2642 Highway J-46  
  Corydon, IA 50060  
                  Phone:               (641) 856-7548  
                  Email:               marshamitchell49@gmail.com
- V.            **Licensed Design Engineer**
- Name:                   Nancy J. Buss  
                  Address:               Hall Engineering Company  
  P.O. Box 825  
  Centerville, IA 52544  
                  Phone:               (641) 437-4477  
                  Email:               **[nbuss@hall-engineering.us](mailto:nbuss@hall-engineering.us)**  
                  Registration Number: 18186
- VI.           **Date Permit Issued:**       May 27, 2008  
                  **Date 8<sup>th</sup> Permit Revision:**   August 30, 2024
- VII.           **Permit Expiration Date:**       May 27, 2038
- 
- Digitally signed by  
Michael W. Smith  
Date: 2024.08.30  
07:56:42 -05'00'
- VIII.           **Issued by:** \_\_\_\_\_  
                                  Environmental Protection 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 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 landfill.

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 Iowa Administrative Code (IAC) 567 113.9<sup>2</sup>. 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 IAC 567 113.14(455B)<sup>1</sup>. 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, for the North Unit, 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 to both the Field and Main offices of the

<sup>1</sup> See rules published 7/4/07 and effective 12/10/07

<sup>2</sup> See rules published 12/11/02 and effective 1/15/03

DNR. Biennial reports, for the South Unit, 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 each inspection 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 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 prepared by Hall Engineering Company dated June 21, 1995 and revised through the hereby-approved addendum dated July 2, 2007, also prepared by Hall Engineering Company.
  - a. The Construction Certification Documents dated November 16, 2005, and January 27, 2006, as submitted by Hall Engineering Company related to the construction of final cover on a portion of the Appanoose County Sanitary Landfill and approved on May 3, 2006, are incorporated as part of the permit documents.
  - b. The Landfill Final Cover As Built Drawings, dated December 12, 2008, and the Landfill Closure Compliance Report, dated December 23, 2008, both submitted by Hall Engineering Company, are incorporated as part of the permit documents.
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. This site shall be monitored for water quality in accordance with the approved Hydrologic Monitoring System Plan (HMSP) dated October 12, 1992, as submitted by Patzig Laboratories, and a variance request approved April 12, 2017, and the following:
  - a. The HMSP for the North unit shall include upgradient groundwater monitoring points PZ-12, MW-51 and MW-60; downgradient monitoring points MW-27 and MW-50R.
    1. 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

<sup>1</sup> See rules published 7/4/07 and effective 12/10/07

<sup>2</sup> See rules published 12/11/02 and effective 1/15/03

suspended solids (TSS) in accordance with rule IAC 567 113.10(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.

2. In accordance with approved variance dated April 12, 2017, the current groundwater monitoring program for the North site shall follow rule IAC 567 113.10 (effective 2/4/09) in lieu of IAC 113.2(5).
  3. The frequency for full Appendix II analysis at monitoring points that are in assessment monitoring and have had at least two (2) rounds of analysis using the entire Appendix II list may be increased to once every (5) five years. If monitoring points exit assessment monitoring and later return to assessment monitoring an additional two (2) rounds of analysis using the entire Appendix II list is required.
  4. 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.
- b. The HMSP for the South unit has been terminated effective February 7, 2020, as requested in the 2019 Annual Water Quality Report, dated January 28, 2020. Abandonment of unused monitoring wells and piezometers in accordance with IAC 113.10(2) may proceed as requested in the 2019 Annual Water Quality Report, dated January 28, 2020.
  - c. An AWQR summarizing the effects the facility is having on groundwater quality shall be submitted to the DNR's Solid Waste Section by January 31 each year. This report shall be prepared in accordance with subrule 113.10(10) by a qualified groundwater scientist pursuant to paragraph 113.10(1)"d", the unnumbered amendment regarding semiannual water quality reports, dated May 22, 2013, and by using the DNR Annual Water Quality Report Format.
  - d. The Soil Boring and Monitoring Well Diagram report for installation of gas probes GP-1 and GP-2 and monitoring well MW-29R-2, dated July 30, 2019, as prepared by Hall Engineering Company, is approved and incorporated into the permit on August 21, 2019. A correction to well screen elevations was included in report dated November 15, 2019, as prepared by Hall Engineering Company, approved on November 22, 2019 and incorporated into the permit.

<sup>1</sup> See rules published 7/4/07 and effective 12/10/07

<sup>2</sup> See rules published 12/11/02 and effective 1/15/03

- e. The Monitoring Well Construction Form for new background well MW-60, dated July 29, 2024, as submitted by Hall Engineering Company, is hereby approved and incorporated into the permit.
5. 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.
6. 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.
7. 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.
8. 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. The permit holder shall semi-annually monitor and annually report site explosive gas concentrations pursuant to paragraph 113.26(15)“b”<sup>2</sup> at the former landfill equipment maintenance building. Gas results from monitoring wells (with exposed screens) and gas probes (see approved Water Quality and Gas Migration plan in email dated April 11, 2019) shall be accompanied by the corresponding water levels and screened intervals for each well and or gas monitoring probe. Explosive gas monitoring may be discontinued at all monitoring wells and gas probes in the South Unit as requested in the 2019 Annual Water Quality Report, dated January 28, 2020.

The annual report summarizing the explosive gas monitoring results, including an evaluation as to whether each monitoring well or gas monitoring probe screen was exposed or not, and any action taken resulting from gas levels exceeding the specified limits during the previous 12 months shall be submitted to the by November 30 of each year.
9. 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 26, 1995 from providing and implementing a leachate control plan for areas that received wastes prior to July 1, 1992.

Continued exemption is subject to the requirements listed in Special Provision 11.

<sup>1</sup> See rules published 7/4/07 and effective 12/10/07

<sup>2</sup> See rules published 12/11/02 and effective 1/15/03

10. The permit holder is not currently required to install and operate a leachate control system. The need for installation and operation of a leachate control system in the future will be based upon the permit holder's ability to maintain effective control of leachate at the site. Effective control of leachate shall be determined on a case-by-case basis through (1) complying with the environmental monitoring and corrective action requirements and (2) maintenance of the final cover through control of leachate seeps.

The permit holder is required to annually report the following information within the Leachate Control System Performance Evaluation Report as a supplement to the facility Annual Water Quality Report, as required by paragraph 113.26(8)d<sup>2</sup>:

- a. Semi-annual leachate head elevations from leachate piezometer LF-1,
  - b. An evaluation of the site relative to the criteria listed in the previous paragraph, and
  - c. Any proposed leachate control measures, with an implementation schedule, in the event that effective control of leachate is not being maintained.
11. The permit holder shall follow the approved Emergency Response and Remedial Action Plan (ERRAP) prepared by Midwest Environmental Services and Hall Engineering Company, dated December 2001, during all emergencies pursuant to subrule 113.30<sup>2</sup>. 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.

<sup>1</sup> See rules published 7/4/07 and effective 12/10/07

<sup>2</sup> See rules published 12/11/02 and effective 1/15/03

**XI. Permit Renewal and Revision History**

<b>Date</b>	<b>Comment</b>
5/27/2008	Closure Permit Issued
4/14/2017	Incorporates permit amendments 1, 2, 3, variance request approved April 12, 2017, and temporary changes to groundwater monitoring at the South Unit. Permit amendment No. 4 is superseded by approval of variance request.
3/22/2018	X.4.c. Permit holder is required to use DNR approved AWQR template.
4/16/19	X.4.b. Revises water quality sampling to South Unit approving a proposed step out monitoring well. X.9. Approves installation and use of proposed gas monitoring probes.
8/21/19	X.4.d. Approves gas probes GP-1 and GP-2 and MW-29R-2.
11/22/19	X.4.d. Approves correction to well screen elevations.
2/7/20	IX. Changed engineer inspections in the South Unit to biennial frequency. X.4.b. Terminated the HMSP in the South Unit and approved the start of abandonment of unused monitoring wells and piezometers in the South Unit. X.8. Terminated monitoring for explosive gas in the South Unit.
2/8/23	X.8. Changed monitoring frequency to semi-annual.
8/30/24	X.4.e. Approves new monitoring well MW-60.

<sup>1</sup> See rules published 7/4/07 and effective 12/10/07

<sup>2</sup> See rules published 12/11/02 and effective 1/15/03