

April 9, 2026

Brad Davison
Environmental Specialist
Iowa Department of Natural Resources
6200 Park Avenue, Suite 200
Des Moines, Iowa 50321



RE: Audubon County Sanitary Landfill
Spring 2026 Semi-Annual Inspection
IDNR Permit #05-SDP-01-75C
HLW PN 6050

Dear Mr. Davison,

This semi-annual inspection of the Audubon County Landfill was conducted the afternoon of April 8, 2026. The results of the inspection were discussed with Tami Anderson, Director, upon completion. Weather conditions were clear with strong winds and temperatures in the 70's.

Background

An IDNR letter dated October 1, 2007 authorized the landfill to continue to deposit waste until October 20, 2007. A variance request was approved on May 20, 2008 that allowed the landfill an extension for disposal of waste after October 1, 2007 while construction of the Audubon County Solid Waste Transfer Station was completed. The variance allowed the landfill to close under the previous Chapter 113 rules. The permitted landfill stopped accepting waste on October 20, 2007 and began transferring waste to the Harrison County Sanitary Landfill. The SDP Permit for the Audubon County Solid Waste Transfer Station expires on October 7, 2028.

Status of the Permit

The Closure Permit was issued July 3, 2008 and expires July 3, 2038. The facility has received the following amendments to the Closure Permit to date:

- Permit Amendment #1, issued March 1, 2009, approved the construction certification documents of the landfill cap.
- Permit Amendment #2, January 27, 2010, approved the removal of MW-90-5 and MW-90-8 from the groundwater-monitoring network.
- Permit Amendment #3, October 26, 2010, approved a variance to change the monitoring program to comply with the revised Chapter 113 requirements.
- Unnumbered Permit Amendment, May 22, 2013, provided for the elimination of the requirement for a Semiannual Water Quality Report and revised the special provisions for Annual Water Quality Reports.
- Unnumbered Permit Amendment, July 10, 2014, required a review of total suspended solids (TSS) and turbidity testing. Sampling procedures have been modified to address this amendment, and a letter discussing TSS and field turbidity measurements was submitted on November 2, 2020 (Doc #98879). IDNR concurred with the TSS/field turbidity correlation in the letter dated March 4, 2021.

- Permit Amendment #4, November 20, 2014, approved an alternative sampling frequency for Appendix II monitoring.

PERMIT PROVISION STATUS

General Provisions

1. The 2026 Financial Assurance documentation was submitted to IDNR on October 3, 2025 (Doc #114417) and approved by IDNR on February 12, 2026 (Doc#116143)
2. The site was staked and surveyed upon completion of the closure activities. Semi-annual inspections are being conducted and reports submitted as required.

Special Provisions

1. The landfill stopped accepting and disposing of all wastes on October 20, 2007. Final cover has been installed.
2. Closure of the Audubon County Sanitary Landfill occurred in general accordance with the approved Closure and Post-Closure Plan.
3. No waste is being accepted. No recycling or composting is occurring on the landfill areas. Recycling activities are being conducted under the Audubon County Solid Waste Transfer Station permit.
4. Closure certification documentation was submitted to IDNR on January 12, 2009 and January 30, 2009 (Doc #37032). Permit Amendment #1 approved the documentation on March 1, 2009.
5. Monitoring is being conducted as detailed in the permit provisions, variance, permit amendments #2, #3, and #4, and the unnumbered permit amendments.

The monitoring program includes the sampling of the drainage tile (SW-3) that surrounds the leachate lagoon and outlets northeast of the lagoon. Tiles and drainageways appear to be functioning properly.

6. The site is inspected semi-annually by a consultant who provides a summary of the site conditions and reports any recommendations for corrective actions.
7. Diversion and drainage systems have been installed as detailed in the submitted plans. No ponded water was observed during this inspection.
8. Most of the site demonstrates good vegetative growth with the exception of a small area of stressed vegetation noted on the cap (see Item 9). The cap was mowed during 2025 - the regular mowing has greatly improved the appearance of the landfill and is limiting the growth of saplings on the final cap. The mowing also helps locate settlement and erosion problems allowing staff to make needed repairs in a timely manner. Staff continues to remove trees from the cap as needed. Trees were noted during the inspection in the terrace east of the leachate storage lagoon, near PZ-5, and near PZ-10. Some trees were also noted near the lagoon fence.

Willows and other trees growing in the central drainage ditch (containing the leachate clean-outs

and one monitoring well) were previously trimmed but are becoming reestablished. The tree growth should be removed if drainage in the ditch is hindered.

9. Staff reseeds repaired and sparsely vegetated areas as needed. Staff has also used county ditch cleanings and composted yard waste to correct settlement problems in the past. Areas of stressed vegetation between PZ-5 and PZ-6 were reseeded last year and new growth is noted. A small area of stressed vegetation was noted southeast of PZ-8. The approximate location of the stressed vegetation is included on the attached figure.
10. Methane gas monitoring is being conducted semi-annually as approved in the email from IDNR dated April 21, 2020 (Doc #97559). Results of gas monitoring will be included in the Annual Water Quality Report (AWQR). Based upon the February 25, 2014 IDNR letter, ambient gas monitoring has been replaced by monitoring of the vadose zone in the monitoring wells. Wells are being checked for methane gas during each sampling event prior to measuring the static water level.
11. Leachate piezometer measurements are conducted semi-annually as approved in the IDNR letter dated March 5, 2020. Leachate piezometers PZ-2 and PZ-4 are broken off at ground level but can still be measured. Leachate is collected in the storage lagoon and when levels require transported to the POTW for treatment in accordance with the approved treatment agreement. Leachate was hauled from the lagoon in 2023 and approximately 2 feet of freeboard was observed in the lagoon during this inspection. Plans are being made to haul leachate this Spring. An aerator is installed in the lagoon when lagoon levels are sufficient to support the aerator above the lagoon bottom. A Leachate Control System Performance Evaluation Report is included in the Annual Water Quality Report each year.
12. An updated Emergency Response and Remedial Action Plan (ERRAP) was approved with the closure permit. The majority of the ERRAP is still applicable for the closed facility. The ERRAP for the Transfer Station was updated in 2020 and can be referenced as well.

Annual Water Quality Report

The 2025 Annual Water Quality Report (AWQR) was received by IDNR on January 30, 2026 (Doc #115943). IDNR has not yet commented on the report.

A Notification Letter - Alternate Source of Carbon Disulfide was submitted to IDNR on January 9, 2026 (Doc #115558). The letter contained documentation that linked the carbon disulfide detected at MW90-17 and MW91-20 during the Fall, 2025 sampling event to two (2) new brands of latex gloves utilized during the field sampling. IDNR agreed that the carbon disulfide “detections recorded on October 17, 2025 may be dismissed”.

A Post-Closure Care - Reduction Termination Plan was submitted to IDNR on February 2, 2026 (Doc # 115993). The Plan contained a request to start the Environmental Covenant process for the facility. IDNR has not yet commented on the submittal.

Other Comments

IDNR Field Office #4 inspected the site on July 1, 2025. The inspection noted trees on the cap and in the lagoon fence with the follow-up action “Continue to monitor for and remove trees on the closed landfill and around the leachate lagoon.”

Soil has been added to the gravel access road to provide a crown to the road cross-section. The road is passable for vehicular access to the lagoon.

A wet area was noted north of PZ-10 during the Spring 2024 inspection. The area was noted as dry during this inspection; however, there was evidence of wildlife activity which has damaged the vegetation in this area. This area appears to be outside of the historic waste boundary.

Two rills have formed near PZ-10; however, the rills are well vegetated and based on the condition of vegetation in this area, the rills do not appear to be active. The rills appear to be outside of the historic waste boundary and no waste is exposed in the rills. The approximate location of the rills is included on the attached figure.

Summary

Except as noted, the landfill appears to be in general compliance with its closure permit and with the IDNR regulations.

This report is based on observations made at the site at the time of the inspection and the information sources referenced in the report. This report does not reflect typical variations experienced at the site throughout the year or variations in conditions that may be observed at the site at other times.

Recommendations

1. Continue tree removal from the cap and around the lagoon as needed and monitor tree growth in the central drainage ditch. If the trees in the ditch hinder surface water drainage have them removed to restore the capacity of the ditch.
2. Continue to monitor area of stressed vegetation southeast of PZ-8.
3. Continue to monitor site vegetation and repair/reseed as necessary.
4. Continue to monitor the vegetated rills near PZ-10.
5. Continue to monitor site erosion, drainage, and diversion systems and repair as necessary.



cc: Tami Anderson, Director, Audubon County Solid Waste Management Commission (*electronic copy*)



AERIAL DATED SEPTEMBER 11, 2025

AERIAL PROVIDED BY THE IOWA STATE UNIVERSITY GEOGRAPHIC INFORMATION SYSTEMS SUPPORT AND RESEARCH FACILITY IN COOPERATION WITH THE IOWA DEPARTMENT OF NATURAL RESOURCES, THE USDA NATURAL RESOURCES CONSERVATION SERVICES, AND THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

REVISION		NO.	1	DATE
DRAWN	JCH/DRA	PROJECT NO.	6050-24A	DATE
				4/09/26

SPRING 2026 INSPECTION

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