

April 29, 2025

Michael W. Smith, P.E.
Environmental Engineer Senior
IDNR – Land Quality Bureau
6200 Park Avenue, Suite 200
Des Moines, Iowa 50321



**RE: SEMI-ANNUAL INSPECTION – SPRING, 2025
RURAL IOWA SLF
IDNR PERMIT #42-SDP-1-72P
VERTICAL EXPANSION AREA - CLOSED
HORIZONTAL EXPANSION AREA - ACTIVE
HLW PN 6006-23A.750**

Dear Mr. Smith:

In accordance with Special Provision XI.8 of the SDP Permit, a semi-annual inspection of the Rural Iowa SLF was personally conducted the morning of April 22, 2025. The inspection was discussed with Tanner Krum, Director, and Bruce Rewoldt, Hill Supervisor, upon its completion. Conditions at the time of the inspection were mostly sunny with moderate winds and temperatures in the 50's.

Sanitary Disposal Project Permit

The SDP Permit for the Rural Iowa SLF was renewed on November 29, 2022 (expires November 29, 2027). The facility has received the following revisions to the Permit to date:

- Permit Revision, June 2, 2023, approved reducing the frequency of leachate piezometer measurements in the Closed Landfilling area from monthly to quarterly.
- Permit Revision, October 31, 2023, approved the request to construct the Trench 3 Phase 2 Expansion area.

Office/Scale Area

The Rural Iowa Waste Management Association (RIWMA) shares scale operations with the Hardin County Solid Waste Disposal Commission (HCSWDC). The scale is operated by HCSWDC personnel.

RIWMA has an equipment and maintenance building located west of the closed west slope of the original landfilling area. This building is used to house staff offices, sanitary facilities, and to store supplies and maintain/store equipment. The building has a concrete parking area for the convenience of employees and customers.

Recycling Facilities/Material Stockpiles

RIWMA does not accept materials for recycling at the landfill. Member counties/communities are responsible for recycling activities. The HCSWDC has recycling operations at their location adjacent to the landfill property. The HCSWDC owns the compost pad and compost pad retention basin west of the original landfilling area.

Original Landfilling Area (Vertical Expansion Area) - CLOSED

All waste disposal operations were completed in the original landfilling area (vertical expansion area) in 2005. The entire original landfilling area is closed with a 4-foot cap (2-foot low hydraulic conductivity infiltration layer and 2-foot erosion layer) in accordance with the approved Closure/Postclosure Plan and applicable IDNR regulations. Construction Certification Reports and Record Drawings were submitted to IDNR and approved for each phase of the closure. As per Special Provision XI.1 of the SDP Permit the thirty year post closure period for the Original Landfilling Area/Vertical Expansion Area began on October 15, 2007.

Leachate collection laterals extending into the waste mass and leachate conveyance piping were installed on the north, east, and west perimeters of the Original Landfilling Area in 1995/1996.

Vegetation is well established on the majority of the Original Landfilling Area although stressed vegetation/bare spots were noted in the areas shown on the attached figure with smaller areas located sporadically on the north slope. Soil has been stockpiled at several of the bare areas and will be spread when conditions allow. Mr. Krum and I discussed the option of placing clean rock in some of the areas where vegetation cannot be established to control potential erosion.

A portion of the cap was mowed in 2024. Mowing improves site aesthetics and aids in the establishment of desirable vegetation by controlling weeds and tree growth on the cap. Mowing also makes potential problem areas, such as leachate seeps and erosion rills, easier to identify.

The vegetation and terraces have limited the formation of significant erosion rills. There was an animal burrow noted east of the northwest terrace intake.

Ditch checks constructed of rock and concrete rubble were installed in the ditch along the toe of the east slope to help control erosion. Ditch checks were also installed along the haul road west of the west slope. The ditch checks in both locations have worked well to limit erosion in these areas.

No leachate seeps were noted in the closed area.

Two areas of ponded water were noted in the closed area, the approximate locations are shown on the attached figure.

Shallow gas vents have been installed on the south slope to limit gas migration toward the agricultural fields to the south.

The erosion at the two locations noted on the bottom terrace bench on the south slope during the Spring 2023 inspection were repaired. The east repair has been successful, the terrace channel is ponded at the top of the west repair which has led to the terrace overtopping in that area.

Subtitle D Compliant Horizontal Expansion Area

The initial cells of the horizontal expansion area, Phase A of Trench 1 and Phase A of Trench 2, were constructed in 2002. Phase B of Trench 1 was constructed in 2003. Phase C of Trench 1 and Phase C of Trench 2 were constructed in 2005. These areas were constructed with Subtitle D compliant alternative liner systems.

Phase 1 of Trench 1 and Trench 2 was constructed in 2008. Phase 2 of Trench 1 and Trench 2 was constructed in 2009. The Trench 3 Expansion project was completed in 2015. The Trench 3 Phase 2 project was approved for waste disposal by IDNR in the IDNR letter dated August 21, 2024 (Doc #110733). These areas were constructed with Subtitle D compliant composite liner systems.

The working face was located at the south end of Trench 2 with the compactor being located at the working face. Soil or a tarp system are utilized as daily cover. The use of the tarp should be encouraged as it will help to reduce the amount of soil used for cover and save airspace to help maximize the life of the facility. Cover soils, when needed, are obtained from the soil stockpiles east of Trench 3.

Due to the windy conditions at the site this Spring litter was noted away from the working face during the inspection with a significant amount controlled by the net litter fence. Litter was also noted at the outlet of the SE detention basin and could impact the operation of the stoplog structure. Some litter was noted off site to the east; however, Mr. Rewoldt reported that this landowner requested that the litter not be retrieved until ground conditions were suitable to limit damage to the field. As an aid to controlling windblown litter, the RIWMA has a wind policy that allows for closure of the landfill in the event of sustained strong winds. A net litter fence has been installed on a portion of the south and east perimeter of the site to limit litter movement off site. Additional fencing was installed late in 2024 and the RIWMA is considering having more fencing installed. Portable litter fences are used when practical to limit litter movement and several portable fences were located adjacent to the working face during the inspection. RIWMA staff retrieve litter on an as needed basis, concentrating on off-site litter first. The RIWMA also has a litter vacuum to aid litter collection efforts. The litter log is maintained by Bruce Rewoldt, Landfill Foreman.

Intermediate cover is added to the north, east, and west slopes of the Horizontal Expansion Area as needed. The thickness of the intermediate cover appeared adequate with the exception of the bottom of the intermediate cover on the east slope. The cover in this area had been disturbed during the Trench 3 Phase 2 project in 2024. The disturbed portions of the cover are being covered as waste deposition continues in Trench 3 Phase 2. The intermediate cover was seeded in 2023 and vegetation is becoming established over the majority of the intermediate cover although some bare areas were still noted on the west and north slopes. Topsoil was spread over some of the bare areas in 2024 but the areas were not seeded. Mr. Krum will contact Hardin

County regarding seeding bare areas in the Original Landfilling Area and the Horizontal Expansion Area.

A reinforced landfill cover (RLC) was installed over the drainage layer in the Trench 3 Phase 2 expansion area to protect the drainage layer and limit leachate generation from this area. The RLC is removed incrementally as needed to expose the drainage layer prior to landfilling. The remaining RLC appeared to be intact. We discussed the need to have the base of Trench 3 Phase 2 covered prior to December 31, 2025.

No leachate seeps were noted in the active area during the inspection.

Due to the recent rains (3" plus since Sunday) some areas of standing surface water were noted in the Horizontal Expansion Area during the inspection.

Leachate collected in the Horizontal Expansion Area flows to a pump station north of Trench 2. The leachate is then pumped through a force main to MH-3(N), at the northeast corner of the Original Landfilling Area. From MH-3(N), the leachate joins leachate collected from the Original Landfilling Area and flows to the underground leachate storage tanks.

Rubble ditch checks have been installed on both sides of the access road west of Trench 1 to help control erosion in this area and have worked well to date.

Annual Water Quality Report

The 2024 Annual Water Quality Report (AWQR) was received by IDNR on January 28, 2025 (Doc #112039). IDNR comments on the 2024 AWQR have not been received to date.

Stormwater Pollution Prevention Plan

The facility operates under NPDES General Permit No. 1 (expires June 16, 2026).

Many of the activities discussed in this inspection report are to insure continued compliance with the Storm Water Pollution Prevention Plan (SWPPP). Staff replaced the outlet pipe in the lower sediment basin during 2024. Due to the sediment removal from the lower sediment basin, outlet pipe replacement, and dry conditions in 2024 a stormwater sample was not collected. HLW Engineering will collect the 2025 stormwater sample when a suitable rainfall event occurs. The containers for the samples have been delivered.

Runoff from the horizontal expansion area drains into several sediment control structures located northeast of Trench 3. Staff removed a portion of the sediment and willow trees from the upper sediment basin in 2024 to restore sediment capacity. Accumulated sediment was removed from the lower sediment basin in 2023 and landfill staff replaced the outlet pipe in 2024. Both basins have adequate sediment storage capacity available and the inlets appear to be free flowing. Areas disturbed during pipe replacement in the lower sediment basin should be seeded.

The sediment basin located in the northwest corner of the landfill property had accumulated sediment removed in 1999 and has accumulated minimal additional sediment to date. This

sediment basin is generally dry, and has an excellent stand of vegetation established. The vegetation helps to slow water flow and trap sediment in the basin.

The southeast detention area had the sediment storage increased, outlet pipe replaced, and a stoplog structure installed on the outlet pipe during the Trench 3 Phase 2 Expansion project in 2024. The stoplog structure appears to be free flowing.

Landfill staff remove accumulated sediment from the sediment control structures when needed to maintain sediment storage. Accumulated sediment should be removed from the ditch west and north of Trenches 1 and 2 – Mr. Krum indicated that this work would be completed in 2025 as conditions allow.

The SPPP and mapping was updated in January 2025 to reflect the completion of the Trench 3, Phase 2 project as well as the improvements to the sediment basins. Areas disturbed during Trench 3, Phase 2 construction were seeded at the completion of the project – emergence has been spotty.

A separate “Stormwater Industrial Routine Facility Inspection Report” was completed during this inspection to satisfy the annual inspection requirement in accordance with the SPPP. The stormwater inspection report is attached to this inspection report and will be filed in the SPPP.

Spill Prevention, Control, and Countermeasures Plan

Due to the amount of petroleum products stored on site, the Rural Iowa Sanitary Landfill operates under a Spill Prevention, Control, and Countermeasures Plan (SPCC). It appears that all petroleum products are being stored as designated in the SPCC. The plug was not installed in the secondary containment system for the diesel and gas tanks during the inspection. Oil dry is available adjacent to the maintenance fluids in the equipment and maintenance building.

The exterior of the tanks and secondary containment systems were visually observed during the inspection with forms documenting the visual inspection completed and provided to Mr. Jass.

Leachate Collection, Storage, and Loadout

Due to the heavy rains the site received the two days prior to the inspection the pump station north of Trench 2 overtopped April 21, 2025. Staff immediately turned off the valves to the pump station and pumped accumulated leachate out of the pump station for disposal to stop the overtopping. Mr. Krum notified IDNR of the overtopping on April 21, 2025. An unknown quantity of leachate reached South Beaver Creek. The point where the leachate entered the creek was reviewed during the inspection, the water was clear and fish were noted in the stream. Some staining of the rock surfacing around the pump station was noted. Daniel Watterson, IDNR Field Office #2, was on site April 22, 2025 in response to the overtopping. Mr. Krum reported that alarm system cellular notifications had stopped and a contractor was notified and replaced one of the antennas the week of April 14 but the system is still not communicating. A pump supplier was on site after the inspection to review the system and discovered that one of the check valves was broken which limited the pumping capacity of the system. Troubleshooting of the pump station will continue.

Leachate is stored in two dual walled underground leachate storage tanks, each with a capacity of 25,000 gallons. The tanks are equipped with a monitoring and alarm system. Both tank monitoring systems were operating during the inspection.

The RIWMA has a leachate treatment agreement with the City of Alden as the primary method of leachate disposal. The RIWMA also has a leachate treatment agreement with the Des Moines Metropolitan Wastewater Reclamation Authority as a backup disposal option if needed.

The leachate loadout has a concrete spill pad to capture leachate that may be spilled during tank truck loading and direct it back to the leachate storage tanks. No sign of spillage was noted on the pad.

Financial Assurance

The 2024 Financial Assurance documentation was submitted to IDNR on September 27, 2024 (Doc #110956) and approved by IDNR on September 29, 2024. 2025 Financial Assurance documentation has not been submitted to date.

Tree Removal/Stump Monitoring

IDNR Field Office (FO) #2 issued a Notice of Violation (NOV) on September 30, 2019 regarding tree growth on the closure cap. This section of the report has been added as required by the NOV. The majority of the trees have been removed from the cap. No voids were created in the cap during tree removal. A few cedar trees were noted on the cap during the inspection and should be removed.

Additional Comments

The landfill had a fire on April 15, 2025 – IDNR was notified at that time. Due to the location of the fire there was concern that the fire could have damaged the liner in the Trench 3, Phase 2 disposal area. HLW reviewed the area on April 16, 2025 and no visual damage was noted. Written confirmation of the site review will be submitted to IDNR separately.

IDNR sent an email dated January 3, 2025 (Doc #111646) as a follow up to the Fall 2024 Semi-Annual Engineer's Inspection. The email requested status updates to the following items noted in the inspection report:

- *Reseeding.* Mr. Krum will contact Hardin County to have bare areas hydroseeded.
- *Soil cover over pipe.* This area has been repaired (reported to IDNR on February 3, 2025 – Doc #112184).
- *Passive gas vents.* Mr. Krum said these will be installed this Spring when conditions allow. The materials needed for vent installation are on site.

Documentation on Random Load Inspections is maintained by Mr. Rewoldt.

The leachate lines were cleaned in 2023. As per IDNR regulations leachate lines must be cleaned every 3 years so the next cleaning should be scheduled for 2026.

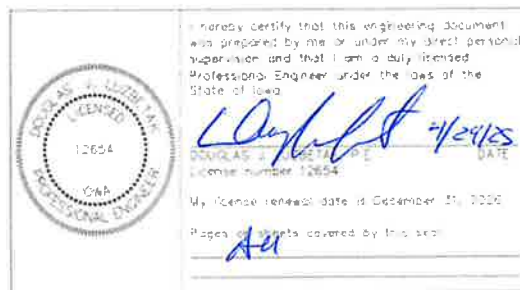
All access roads on site were in good condition; well graded and free of depressions and ruts.

The landfill currently has 4 certified landfill operators and 2 employees that have completed the 25 hour HAZWOPER course in the event household hazard materials are found in the waste.

This report is based on observations made at the site at the time of the inspection and the sources referenced in the report and 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. Repair pump station and alarm system communications.
2. Eliminate ponding on the closure cap.
3. Continue to retrieve windblown litter.
4. Install passive gas vents.
5. Remove sediment from the ditch west and north of Trenches 1 and 2.
6. Collect annual stormwater sample.
7. Remove the stained rock surfacing at the pump station.
8. Seed the bare/thin areas on the closure cap, intermediate cover, and the lower sediment basin.
9. Continue tree removal as needed, monitor stumps for regrowth, and treat stumps as needed.
10. Monitor level of sediment in sediment basins, ditch checks, and other sediment control structures and remove sediment as needed to maintain capacity.



cc: Tanner Krum, Director, Rural Iowa SLF (electronic copy)
Madelynn Austin, IDNR Field Office #2 (electronic copy)

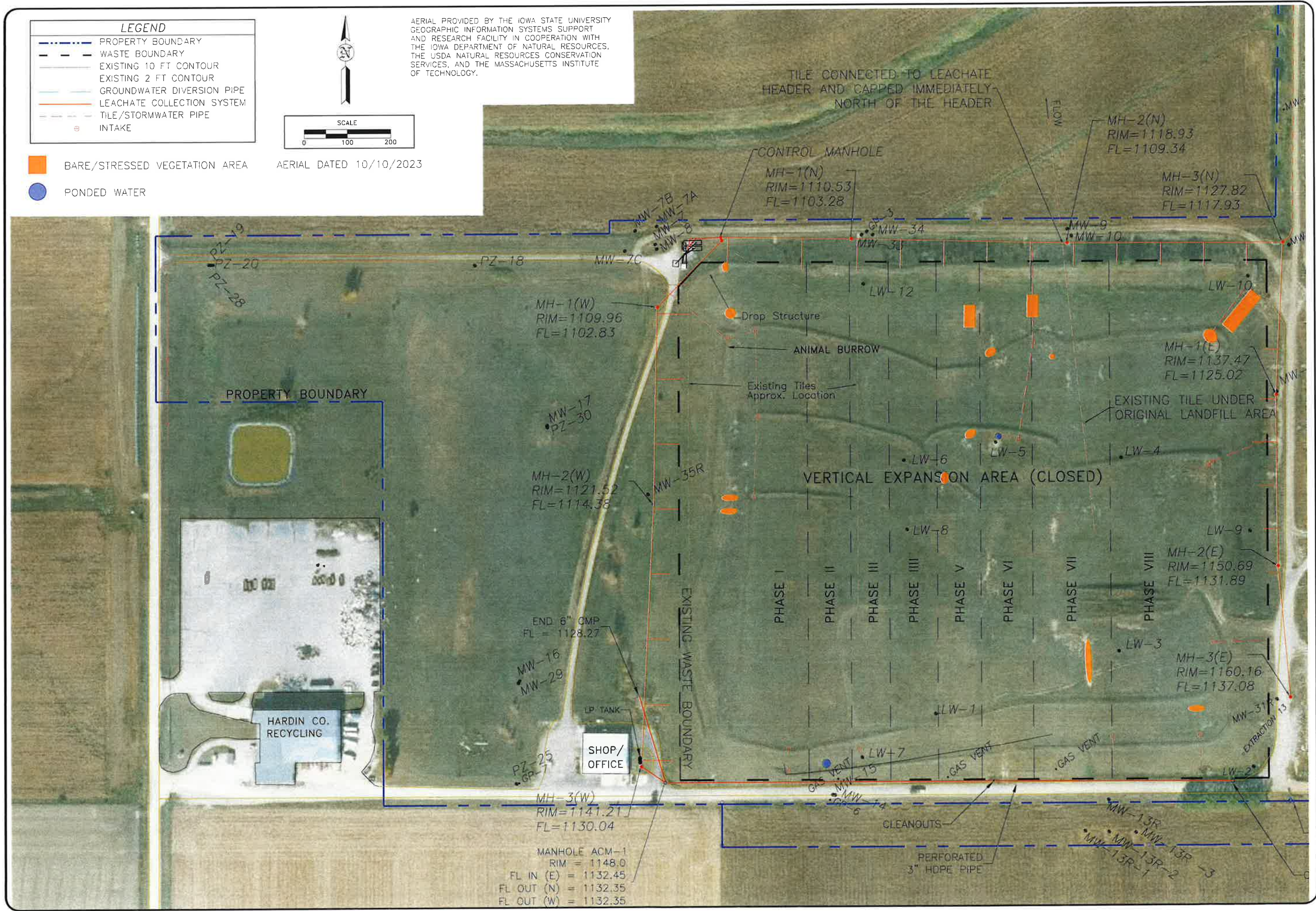


FIGURE: 1

SPRING 2025 INSPECTION

HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146



RURAL IOWA SANITARY LANDFILL
ELDORA, IOWA

REVISION	NO.	DATE
DRAWN	JCH	4/23/25
PROJECT NO.	6006-23A	

General Information			
Facility Name	Rural Iowa Sanitary Landfill		
NPDES Tracking No.	Authorization # 20269-20041		
Date of Inspection	April 22, 2025	Start/End Time	8:00 AM/11:00 AM
Inspector's Name(s)	Douglas J. Luzbetak, P.E.		
Inspector's Title(s)	Project Manager		
Inspector's Contact Information	HLW Group, PO Box 314, Story City, IA 50248, (515)733-4144		
Inspector's Qualifications	Professional Engineer, project manager at the site since 1995		
Weather Information			
Weather at time of this inspection? <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snow <input type="checkbox"/> High Winds <input type="checkbox"/> Other: Temperature: 50's			
Have any previously unidentified discharges of pollutants occurred since the last inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: The pump station overtopped April 21, 2025. Staff immediately closed the valves and removed accumulated water from the pump station with their tank truck. Some staining of the rock surfacing in this area is noted. An unknown quantity of leachate reached South Beaver Creek prior to the valves being shut. Mr. Krum reported the overtopping to IDNR on April 21, 2025.			
Are there any discharges occurring at the time of inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: Discharge of clear water from lower sediment basin, SE detention basin			

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
1	Terrace system on closed landfill	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
2	Lower Sediment Basin	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Accumulated sediment was removed in 2023. Outlet pipe was replaced by landfill staff in 2024.
3	Upper Sediment Basin	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	A portion of the accumulated sediment was removed in 2024
4	Sediment check berm w/ plastic pipe (SE corner of Trench 6)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Sediment storage area was enlarged, outlet pipe replaced, and stoplog structure installed on the outlet pipe in 2024.
5	Tile and intakes (S of Trench 1 and 2)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	One intake removed during Trench 3 Expansion project and tile outlet rerouted to SE check berm (Item 4).
6	Rubble ditch checks (E of closed area)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
7	Rubble ditch checks (W of closed area)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
8	W Sediment Basin	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
9	Rubble ditch checks (W of Trench 1)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	

Areas of Industrial Materials or Activities exposed to stormwater

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2	Equipment operations and maintenance areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
3	Fueling areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
4	Waste handling and disposal areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Retrieve windblown litter
5	Erodible areas/construction	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Monitor intermediate cover and soil stockpiles for erosion
6	Dust generation and vehicle tracking	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No tracked litter or mud was noted at landfill entrance/exit
7	Leachate Tank Loadout	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

None.

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Staff replaced the outlet pipe in the lower sediment basin in 2024. Due to sediment removal, pipe replacement, and dry conditions in 2024 the annual stormwater sample was not collected. HLW Engineering will collect the 2025 stormwater sample when a suitable rainfall event occurs. The containers for the samples have been delivered.

Seed to establish vegetation on areas of the closure cap with thin vegetation. Continue to seed the intermediate cover of the Horizontal Expansion Area as needed.

Monitor site erosion and repair as necessary.

Monitor site vegetation and repair as necessary.

Notes

Use this space for any additional notes or observations from the inspection:

The pump station overtopped April 21, 2025, IDNR was notified on April 21, 2025. Staff immediately turned off the valves to the pump station and pumped accumulated leachate out of the pump station for disposal. Some staining of the rock surfacing was noted. An unknown quantity of leachate reached South Beaver Creek. The point where the leachate entered the creek was reviewed during the inspection, the water was clear and fish were noted in the creek. Daniel Watterson, IDNR Field Office #2, was on site April 22, 2025 in response to the overtopping. The pump station was operating during the inspection.

Continue to remove silt fence posts in areas where vegetation is established.

The SPPP and mapping was updated in January 2025 to reflect the completion of the Trench 3, Phase 2 project and personnel changes on site.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: Douglas J. Luzbetale, PE

Signature: 

Date: 4/29/25