

April 15, 2025

Brad Davison
Environmental Specialist
IDNR – Land Quality Bureau
6200 Park Avenue Suite 200
Des Moines, IA 50321



**RE: BIENNIAL INSPECTION REPORT – 2025
CITY OF AMES SANITARY LANDFILL (CLOSED)
HLW PN 6001-24A.750**

Dear Mr. Davison,

In accordance with Specific Restriction d.2 listed under Item 7 of the Environmental Covenant (EC) between IDNR and the City of Ames, Iowa, a biennial inspection of the City of Ames Sanitary Landfill was personally conducted the afternoon of April 10, 2025. I was accompanied on the inspection by Mark Peebler, Superintendent, and Aaron Wirth, Assistant Superintendent, City of Ames Resource Recovery Plant. Conditions at the time of the inspection were overcast with gusty winds and temperatures in the 50's.

The initial biennial inspection for this facility under the provisions of the Environmental Covenant was conducted on April 19, 2023 and submitted to IDNR on April 27, 2023 (Doc #106474).

Status of the Permit

The Environmental Covenant was recorded with the Story County Recorder as Instrument 2021-09924 on August 2, 2021 (Doc #102032). As a result, IDNR SDP Permit Number 85-SDP-08-88C was rescinded in the IDNR letter dated January 21, 2022 (Doc #102092). This letter also served as "notice of completion of the regulated post-closure care period for the City of Ames Sanitary Landfill".

Environmental Covenant, Item 7 – Activity and Use Limitations and Terms

General Restrictions

- a. No excavations greater than 2' have been completed on the property.
- b. No waste has been excavated, disrupted, or removed from the closed landfill site.
- c. No drinking water wells have been constructed within the boundaries of the property.
- d. No residences have been constructed with the boundaries of the property.

Specific Restrictions

a. Restrictions and use limitations and terms due to continued management of landfill gas:

- 1) No enclosed structures have been placed or constructed on the landfill cap.
- 2) No controlled burns have been conducted on the property.

b. Restrictions and use limitations and terms due to continued management of leachate:

- 1) The leachate control system is being operated and maintained. Leachate collected from the leachate control system is disposed of at the Ames Water Pollution Control Facility. Additional information on the leachate control system is contained in the Leachate Control System Performance Evaluation (LCSPE) that is being submitted with this inspection report.

c. Restrictions and use limitations and terms related to site access:

- 1) The landfill entrance is secured by a locked gate.

d. Restrictions and use limitations and terms related to land use:

- 1) The integrity of the landfill cap is being maintained. Additional discussion on the landfill cap is contained in the text below.
- 2) This report serves as the Biennial Inspection.

Landfill Cap Integrity

All diversion and drainage systems are in good condition with minimal evidence of erosion. Intakes of the terrace system reviewed during the inspection appeared to be unobstructed and free flowing.

The landfill vegetation is in good condition. One bare area was noted, the approximate location is shown on the attached figure. Compost has been stockpiled near this area. Mr. Peebler reported that the compost would be spread over this area and it would be reseeded.

Mr. Peebler reported that typically portions of the site are mowed annually; however, no areas were mowed in 2024. Regular 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 observe. Some saplings were noted on the cap. The saplings appear to be regrowth after past mowing and are of a size that should be able to be

controlled by periodic mowing. Regular mowing should continue - annual mowing is not necessary if a longer mowing interval is able to control tree growth.

No ponding or leachate seepage was noted on the landfill cap during the inspection.

Mr. Peebler reported that the condition of the cap is reviewed regularly by City staff. A spreadsheet documenting the reviews is attached.

City staff plans to abandon the remaining leachate wells (4) on site to eliminate obstacles encountered during site mowing and improve site maintenance. The locations of the leachate wells are included on the attached figure. Additional information is contained in the LCSPE that accompanies this report.

Slope Monitoring

Areas in the northwest portion of the site have steep slopes and have been stabilized with rubble in the past. Mr. Peebler reported that City staff has continued to monitor this slope, including the four metal pins that had been set previously to monitor slope movement. City staff has also continued to survey the pins semi-annually. We discussed no longer surveying the pins since no pin movement has been noted previously. Dates of pin reviews and pin surveys are included on the attached spreadsheet. Staff will continue with the visual slope reviews.

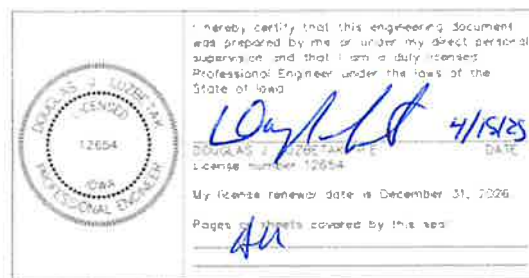
Additional Comments

IDNR Field Office #5 conducted an inspection of the facility on August 17, 2023. "Several bare areas were observed adjacent to the access road to the north, prior to where the access road turns to the north." This area was reviewed during this inspection and no bare areas were noted.

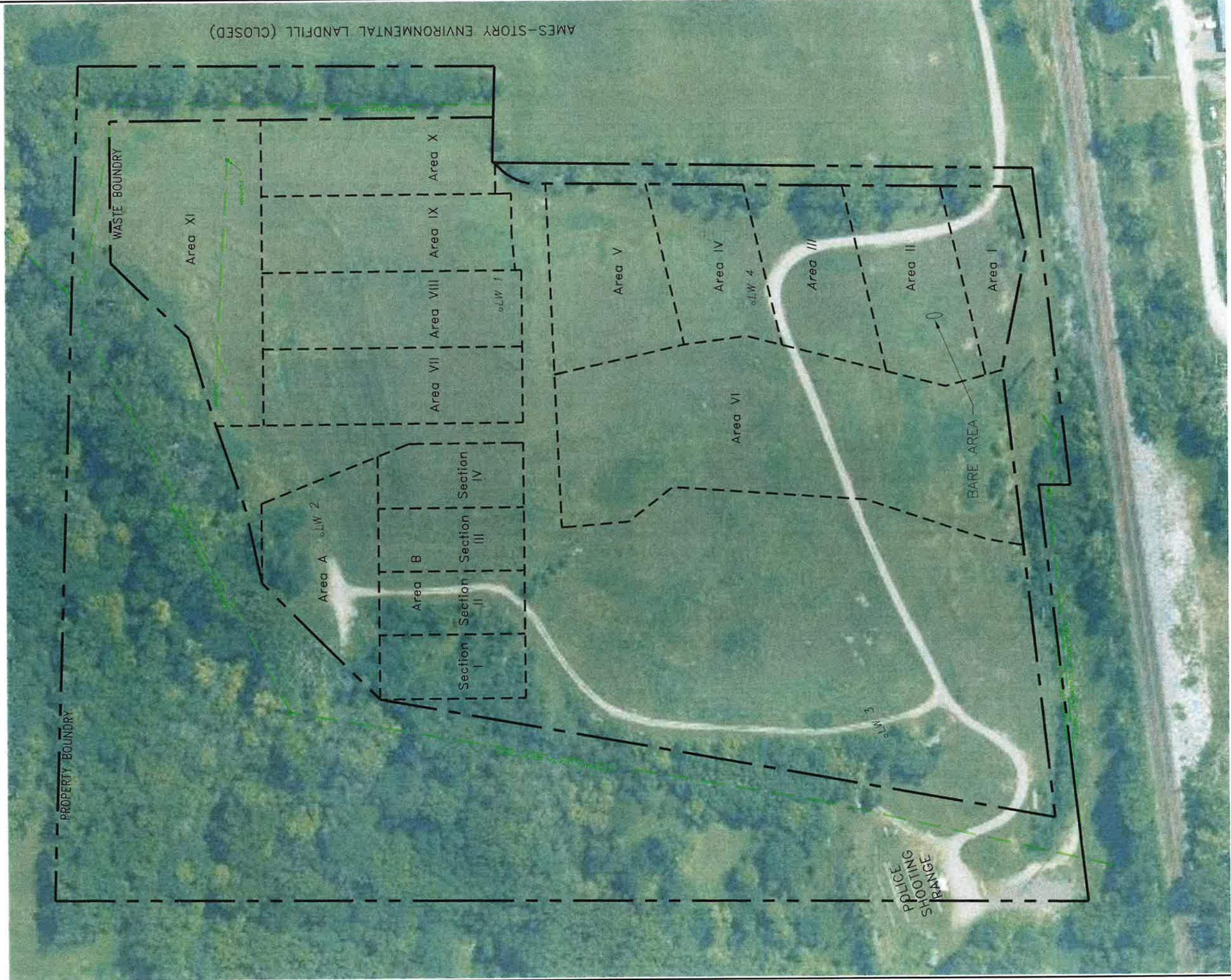
This report is based on observations made at the site at the time of the inspection and the information sources referenced in the report. This report does not reflect typical variations experienced at the site throughout the year or variations in conditions that may be observed at the site at other times.

Recommendations

1. Continue collection and disposal of leachate as per the Environmental Covenant.
2. Add compost to the bare area and reseed. Continue to monitor vegetation and erosion and repair as necessary.
3. Remove saplings growing on cap.
4. Remove the leachate wells.
5. Continue to monitor diversion and drainage systems and repair as necessary.



cc: Justin Clausen, Interim Public Works Director, City of Ames (electronic copy)
Mark Peebler, Bill Schmitt, Superintendent, City of Ames Resource Recovery Plant (electronic copy)



AERIAL DATED SEPTEMBER 2, 2023
 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.



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

SITE MAP
 2025 BIENNIAL INSPECTION
 AMES SANITARY LANDFILL
 AMES, IOWA

FIGURE: 1

REVISION	NO.	DATE
DRAWN	PROJECT NO. 6001-23A	DATE 4/14/25
JGH		

Landfill Pin Inspections

Date	Pin Number				Pins are South to North 1-4
	#1	#2	#3	#4	Comments
4/20/2016	Set	Set	Set	Set	BF
5/4/2016	Okay	Okay	Okay	Okay	MP
6/28/2016	Okay	Okay	Okay	Okay	WmJS/DL-COA/HLW - Road base was placed against pin #3 (1000) on the map. No visible movement, but it will be verified by GPS this fall.
7/18/2016	Okay	Okay	Okay	Okay	MP
8/2/2016	Okay	Okay	Okay	Okay	MP
9/6/2016	Okay	Okay	Okay	Okay	MP/DJ
10/12/2016	Okay	Okay	Okay	Okay	MP Verified by GPS no movement
11/18/2016	Okay	Okay	Okay	Okay	MP
12/14/2016	Okay	Okay	Okay	Okay	MP/DJ
1/20/2017	Okay	Okay	Okay	Okay	MP
2/17/2017	Okay	Okay	Okay	Okay	MP Verified by GPS no movement--Equipment change from Topcon to Trimble May cause slight difference in readings. Not able to get coordinates to match up with new equipment. Needs to be re-shot. Still no signs of movement.
3/8/2017	Okay	Okay	Okay	Okay	MP
4/18/2017	Okay	Okay	Removed	okay	MP/AH Pins 1,2,4 Okay; pin #3 Removed while hauling in rip rap for slope at pin #3 location. Working with engineering to relocate pin #3 and replace all four pins with a more permanent surveying monument.
5/3/2017	Okay	Okay	Reset	Okay	No physical signs of movement on pins 1,2,4 and pin 3 was reset. Pins 1,2,4 all recalibrated with Trimble equipment and waiting for new coordinates. Distance from pin #3 to slope was 37 feet. Will also get coordinate for reference point measured to for further tracking.
6/9/2017	Okay	Okay	Okay	Okay	No physical signs of movement.MP
7/14/2017	Okay	Okay	Okay	Okay	No physical signs of movement MP
8/15//2017	Okay	Okay	Okay	Okay	No physical signs of movement MP
9/15/2017	Okay	Okay	Okay	Okay	No physcial signs of movement MP
10/12/2017	Okay	Okay	Okay	Okay	No physcial signs of movement MP/AH and Doug Luzbetak with HLW and Fall 2017 Landfill Inspection
11/15/2017	Okay	Okay	Okay	Okay	WmJS/DL-COA/HLW - Road base was placed against pin #3 (1000) on the map. No visible movement, but it will be verified by GPS this fall.
11/25/2017	-	-	-	-	WmJS one load of black dirt hauled in for soil amendment/enrichment NW corner of landfill NE end of the road
12/15/2017	Okay	Okay	Okay	Okay	No physical signs of movement MP
1/26/2018	Okay	Okay	Okay	Okay	No physical signs of movement MP
2/22/2018	Okay	Okay	Okay	Okay	No physical signs of movement MP
3/7/2018	Okay	Okay	Okay	Okay	No physical signs of movement MP/WmJS
4/4/2018	Okay	Okay	Okay	Okay	No physical signs of movement MP

4/23/2018	-	-	-	-	Streets Dept. hauling in rip rap and black dirt for maintenane through out the week
4/26/2018	Okay	Okay	Okay	Okay	No physical signs of movement MP/WmJS
4/26/2018	-	-	-	-	Mark Peebler, Bill Schmitt, Doug Luzbetak conducted the 2018 Spring Landfill Inspection
5/11/2018	-	-	-	-	Pins surveyed and added to spreadsheet
5/23/2018	Okay	Okay	Okay	Okay	No physical signs of movement MP/AW
6/25/2018	Okay	Okay	Okay	Okay	No physical signs of movement MP
8/2/2018	Okay	Okay	Okay	Okay	Point #5 (replacement for original Point #3) marker lathe broken and concrete ring may have been moved due to road maintenance. Pin doesn't look like it has moved. MP
9/11/2018	Okay	Okay	Okay	Okay	Pins looked good and no signs of movement. MP
9/12/2018	-	-	-	-	Landfill mowed 9/12 thru 9/17 MP
10/5/2018	Okay	Okay	Okay	Okay	Pins looked good and no signs of movement. MP, DL (HLW)
10/5/2018	-	-	-	-	2018 Fall Landfill Inspection MP and DL(HLW)
11/8/2018	Okay	Okay	Okay	Okay	Pins good and no signs of movement
11/27/2018	-	-	-	-	Pins were surveyed by Scott Miller COA
12/4/2018	Okay	Okay	Okay	Okay	Pins good and no signs of movement
12/7/2018	-	-	-	-	Flushed south leachate lines with 900 gallons water MP with Dale Weber with big vac truck
12/12/2018	-	-	-	-	Flushed northeast leachate lines at manhole with riser with 1000 gallons water. MP with Dale Weber with big vac truck
1/10/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement Point #5 has had heavy equipment on both sides. Ring may have had movement but appears pin has not been moved. MP
2/22/2019	-	-	-	-	Too much snow on access road for inspection, will try at a later date. MP
3/15/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
4/18/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP & WmJS
4/23/2019	-	-	-	-	2019 Sring Landfill Inspection Mark Peebler and Doug Luzbetak HLW. Noted a couple spots of low areas from settling and vehicle ruts that will be repaired when dry, otherwise landfill is in great condition.
5/22/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
6/7/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
7/11/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
8/21/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
9/30/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
10/17/2019	-	-	-	-	2019 Fall landfill inspection. Mark Peebler, Aaron Wirth, and Doug Luzbetak HLW.
10/17/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement. Mark Peebler and Aaron Wirth, cleared brush near pins to allow for surveying.
11/5/2019	-	-	-	-	Scott Miller surveyed and updated Pin spreadsheet for monitoring.
11/22/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
12/20/2019	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
1/13/2020	-	-	-	-	Too much snow on access road for inspection, will try at a later date. MP

2/7/2020	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
3/6/2020	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
4/3/2020	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
					2020 Spring Landfill Inspection. Doug Luzbetak HLW and Mark Peebler. Pins look good no signs of movement. Mowing would be beneficial for small saplings coming up. South East ground cover has been established and silt fence can be removed.
4/9/2020	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
5/12/2020	Okay	Okay	Okay	O	Rod Spaid w/Parks and Rec mowed the landfill most of the saplings, along road, cap and around shooting range. MP
5/21/2020	-	-	-	-	Pins good and no signs of movement. MP
6/15/2020	Okay	Okay	Okay	Okay	Pins good and no signs of movement. Saplings growing up very quickly even in areas that were mowed in May
7/13/2020	Okay	Okay	Okay	Okay	MP Pins good and no signs of movement. No signs of tree damage from high winds during storm on 8/10/2020.
8/13/2020	Okay	Okay	Okay	Okay	MP
					Mark Peebler (COA) and Todd Whipple (HLW) tested water levels and Flammable gas at Monitoring Wells #9 and #17 in accordance with Railroad easement
9/1/2020	-	-	-	-	Pins good and no signs of movement. MP
9/1/2020	Okay	Okay	Okay	Okay	2020 Fall Landfill Inspection. Doug Luzbetak HLW and Mark Peebler. Pins look good no signs of movement. Small rill erosion beginning from deer path on west side of cap off access road.
10/23/2020	Okay	Okay	Okay	Okay	Scott Miller surveyed and updated Pin spreadsheet for monitoring.
10/26/2020	-	-	-	-	Repaired small rill erosion noted on the Fall inspection with rock, pulled remainder of metal posts from silt fence on southeast corner, graded access road at entrance.
					Mark Peebler and Brian Heenan.
11/5/2020					Pins good and no signs of movement. MP
11/25/2020	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
12/18/2020	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
1/21/2021	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
2/23/2021	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
					2021 Spring Landfill Inspection. Doug Luzbetak HLW and Mark Peebler. Pins look good no signs of movement. Small rill erosion beginning on west side just south of previously repaired rill location. Another small rill located on south slope near power pole. Small ponding area on both sides of road near LW-3 and one area just north of access road by LW-4.
3/9/2021	Okay	Okay	Okay	Okay	
					9:00AM - Matthew Graesch and Melia Shepard, from the field office IDNR, Doug Luzbetak(HLW), Bill Schmitt and Mark Peebler (City of Ames) walked the cap of the landfill for inspection as part of the environmental covenant process.
3/29/2021	-	-	-	-	Scott Miller (City of Ames) surveyed and updated Pin spreadsheet for monitoring.
4/9/2021	-	-	-	-	Pins good and no signs of movement. MP
4/9/2021	Okay	Okay	Okay	Okay	

5/17/2021	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
6/18/2021	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP, WmJS
7/23/2021	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
					Pins good and no signs of movement. MP UPRR tanker car still at Southwest corner by shooting range. Looks like someone cut link of chain out with a torch at entry gate for access. Pin areas need brush cut before next survey is completed. MP
8/27/2021	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
9/21/2021	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
10/15/2021	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP Flushed Northeast and Southeast sanitary lines for leachate with 500 gallons in each. Water flowed without any issue at both locations. The jet-vac truck was used.
11/24/2021	Okay	Okay	Okay	Okay	Scott Miller (City of Ames) surveyed and updated Pin spreadsheet for monitoring.
12/3/2021	-	-	-	-	
12/22/2021	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
1/18/2022	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
2/16/2022	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
3/15/2022	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
4/21/2022	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP/AH
5/19/2022	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP/DR
5/19/2022	-	-	-	-	Cleared saplings and brush away from pins for clear surveying. MP/DR
6/13/2022	-	-	-	-	
6/21/2022	Okay	Okay	Okay	Okay	Pins were surveyed by Scott Miller COA and spreadsheet was updated by Myron Daringer COA
7/18/2022	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP Pins good and no signs of movement. Replaced south gate top hinge pin. Star Equipment delivered Track loader, bucket and forestry mulcher and we started mowing and removing saplings.
7/19/2022	-	-	-	-	
8/19/2022	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
9/22/2022	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
10/24/2022	-	-	-	-	HLW Todd Whipple, Bill Schmitt and Adam Hyer worked with contractor to plug monitoring wells according to environmental covenant. 10/24 - 10/27. Pins good and no signs of movement. Adam and Mark removed all 13 monitoring well casings, cut pipe and backfilled. MP
11/2/2022	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
3/16/2023	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
4/6/2023	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
4/19/2023	-	-	-	-	HLW Doug Luzbetak and Mark Peebler conducted Bi-annual landfill inspection. Discussed removing leachate peizometers and seeding on a couple of bare areas. No more clean fill on Northwest corner of landfill (will become a concern for changing flood plain and run off near creek).
5/5/2023	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
6/13/2023	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
7/3/2023	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
8/18/2023	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
9/20/2023	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP

10/11/2023	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
11/7/2023	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
12/15/2023	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
1/1/2024	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
2/1/2024	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
3/5/2024	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
4/18/2024	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
					Pins good and no signs of movement. APD removed our City padlock and placed theirs on it. Currently need to call dispatch for someone to come out and unlock the gate.
5/8/2024	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP Still no key for gate entrance.
6/13/2024	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
7/22/2024	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
8/14/2024	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
9/9/2024	Okay	Okay	Okay	Okay	Pins good and no signs of movement. MP
					Pins good and no signs of movement. MP Flushed Northeast and Southeast sanitary lines for leachate with 500 gallons in each. Water flowed without any issue at both locations. The jet-vac truck was used.
10/17/2024	Okay	Okay	Okay	Okay	Pins good and no signs of movement.
11/21/2025	Okay	Okay	Okay	Okay	Pins good and no signs of movement.
12/12/2025	Okay	Okay	Okay	Okay	Pins good and no signs of movement.
1/16/2025	Okay	Okay	Okay	Okay	Pins good and no signs of movement.
2/12/2025	Okay	Okay	Okay	Okay	Pins good and no signs of movement.
3/6/2025	Okay	Okay	Okay	Okay	Pins good and no signs of movement.
					Pins good and no signs of movement. Bi-annual inspection of sanitary landfill conducted with Doug Luzbetak (HLW), Mark Peebler (COA), and Aaron Wirth (COA). No rill erosion noted. One small spot at the SE corner that needs compost and seeding. Some small saplings will need to be mowed this year.
4/10/2025	Okay	Okay	Okay	Okay	