

April 22, 2024

Mr. Brian L. Rath, P.E.  
Environmental Engineer Senior  
IDNR – Land Quality Bureau  
Wallace State Office Building  
502 E. 9th Street  
Des Moines, Iowa 50319



**RE: SEMI-ANNUAL INSPECTION – SPRING 2024  
MONONA COUNTY SANITARY LANDFILL  
IDNR PERMIT #67-SDP-01-75P  
HLW PN 6036-23A.750**

Dear Mr. Rath:

In accordance with the General Provisions of the SDP Closure Permit dated January 19, 2016, a semi-annual inspection of the Monona County SLF was conducted the morning of April 18, 2024. Observations during the inspection were discussed with Mr. Logan Persinger, Manager, after completion. Conditions at the time of the inspection were cloudy and breezy with temperatures in the low 50's.

The landfill stopped accepting waste as of November 1, 2014. The landfill was closed with a 4' soil cap in accordance with the approved closure/postclosure plan. Construction of the closure cap was completed on September 14, 2015. Terraces, letdown piping, and seeding were also included in the closure project. A Quality Control and Assurance Report/Closure Compliance Report was submitted to IDNR on September 23, 2015 (Doc #84296). This document was approved in Special Provision X.2.c of the SDP Closure Permit dated January 19, 2016. A notification was filed and recorded with the Monona County Recorder on September 9, 2015 to notify potential future purchasers of the property that the land was once used as a landfill facility. A copy of the notification was included in the report referenced above.

### **Status of the Permit**

The Sanitary Disposal Project Closure Permit for the Monona County SLF was issued on January 19, 2016. The facility has received the following amendments to the Permit to date:

- Permit Amendment #1, May 3, 2016, incorporates the Construction Documentation Form and Boring Log for MW-3R, as well as the Well Plugging Record for MW-3 into the permit documents.
- Permit Amendment #2, July 13, 2017, incorporates the Abandoned Water Well Plugging Record forms for MW-2, PZ-2, MW-8, and PZ-8 into the permit documents. It also acknowledges the inability to locate temporary groundwater monitoring well TMW-1.
- Permit Amendment #3, March 26, 2019, **1)** authorizes the permit holder to discontinue sampling and analysis as required by 567 IAC 114.26(4)"d" and conduct sampling and analysis for total recoverable metals; **2)** authorizes the temporary suspension of sampling for indicator parameters in accordance with

114.26(4)“e’ and “f”; 3) reduces the frequency of routine site inspections from monthly to semiannually; and 4) reduces the frequency of leachate head measurements from monthly to quarterly.

- Permit Amendment #4, August 2, 2019, 1) eliminates the requirement to install a third downgradient water table monitoring well; and 2) changes MW-3R and MW-4 from downgradient monitoring points to background monitoring points.
- Un-numbered Permit Amendment, January 16, 2020, requires the Annual Water Quality Report (AWQR) to be submitted in the new IDNR format by the designated AWQR submittal date in 2021.

IDNR approved a variance to IAC 114.26(4)d, e, and f on March 25, 2019 to discontinue collection of filtered samples and conduct sampling and analysis for total recoverable metal in its place. This variance was incorporated into the SDP Closure Permit in Permit Amendment #3.

IDNR approved a variance to IAC 567-114.22(2) on August 2, 2019 to reduce the number of downgradient monitoring wells required to two (three are required by rule). This variance was incorporated into the SDP Closure permit in Permit Amendment #4.

### **Annual Water Quality Report**

The 2023 Annual Water Quality Report (AWQR) was received by IDNR on November 28, 2023 (Doc #108278). IDNR comments on the AWQR have not been received to date.

### **Financial Assurance**

The 2024 Financial Assurance Documentation was received by IDNR on January 16, 2024 (Doc #108826) and approved on March 5, 2024 (Doc #109429).

### **Special Provisions**

1. The 30 year closure/postclosure period began on January 19, 2016.
2. The site will be closed and maintained in accordance with the closure permit.
3. The Spring groundwater sampling was completed on April 18, 2024.
  - a. Samples were collected from MW-1, MW-3R, MW-4, MW-5, and MW-7
  - b. Water levels were measured at LW-1, PZ-1A, PZ-4, PZ-5, and PZ-7
  - c. Addressed by Permit Amendment #1 (Doc #86174)
  - d. Sampling was completed in accordance with Permit Amendment #4 and the AWQR comment letter dated March 16, 2023.
  - e. No change.
  - f. No change.
4. As per this provision, monthly inspections of the site are required for the first year after issuance of the Closure Permit at a minimum. Permit Amendment #3 reduced the inspection frequency from monthly to semi-annually.

5. Diversion and drainage systems were damaged by a large rain event shortly after completion of the closure cap. Significant repairs have been made to the ditch checks east of the closure area. Repairs to the erosive layer have been documented in past inspection reports. Erosion repair will continue as needed. Diversion and drainage systems are also discussed under “Additional Comments” below.
6. The vegetative cover is continuing to improve. Staff has re-seeded portions of the cap where vegetation was previously damaged or where erosion repairs have been made and vegetation is becoming established. Volunteer tree removal is on-going. Vegetative cover is discussed in more detail under “Additional Comments” below.
7. Refer to Items 5 and 6.
8. Explosive gas monitoring is conducted by HLW during the April and October groundwater sampling events. Landfill staff conducts the explosive gas monitoring in January and July. Results will be included in the AWQR. A request was included in the 2023 AWQR (Doc #108278) to reduce the frequency of gas monitoring to a semi-annual frequency. IDNR comments on the AWQR have not been received to date.
9.
  - a. The facility does not have a leachate control system.
  - b. Leachate was measured by HLW staff in LW-1 during the inspection. The measured leachate thickness was 0.01 ft.
  - c. No change
  - d. No change
10. The ERRAP submitted and dated November 2011 is still generally applicable to the closed facility.

Based on observations during the inspection, along with discussions with Landfill personnel, the facility appears to be operating in general conformance with the closure permit.

### **Additional Comments**

Note that the landfill staff continues to make repairs to erosion rills in the erosive layer as needed. Terrace repairs are considered completed. Terraces on the north slope have been cleaned and reseeded. The historic minor water ponding previously noted on the lower terrace on the north slope has been addressed by removing silt and re-grading to restore drainage. Staff reseeds areas when disturbed by improvements. Erosion mats placed in 2021 in the northwest corner of the landfill and on a west facing slope east of the landfill are helping to control the persistent erosion in those areas.

The tree issue at MW-4 documented in the Spring, 2023 inspection report has been addressed. Numerous trees were removed in the ditch checks and the drainage way along the east side of the fill (outside of the waste boundary). Staff issued a notice to IDNR (Doc #107111) that the tree removal and reseeded were completed by July 3, 2023.

Ditches were free of debris and were draining as intended.

All access roads on site were in fair condition.

The area north of the former shop building that needed fill to fix past ponding issues has been addressed. Vegetation in this area is well established.

The top of the landfill cap was mowed in 2023.

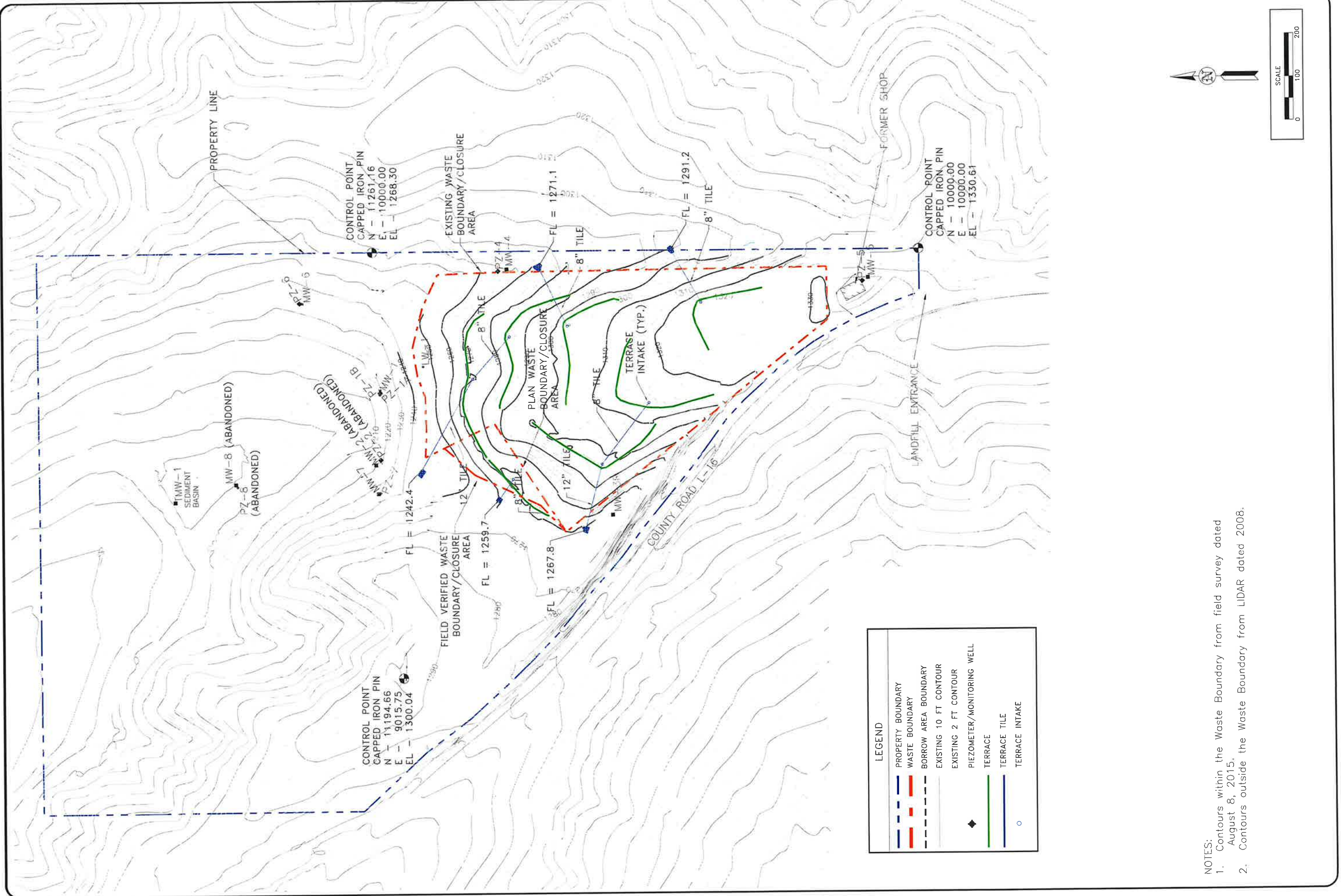
Staff has performed sediment and tree removal in the vicinity of MW-3R and in the sediment basin located north of the landfill.

### **Recommendations**

1. Continue to remove trees and saplings on the cap and in the drainage ways.
2. Continue to monitor erosion and repair as necessary.
3. Continue to remove accumulated sediment from sediment basin and terrace channels where needed.
4. Continue to monitor diversion and drainage systems and repair as necessary.



cc: Logan Persinger, Manager, Monona County Landfill (electronic copy)



- NOTES:
1. Contours within the Waste Boundary from field survey dated August 8, 2015.
  2. Contours outside the Waste Boundary from LIDAR dated 2008.



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SPRING 2024 INSPECTION

MONONA COUNTY SANITARY LANDFILL  
 MONONA COUNTY, IOWA

FIGURE: 1	
REVISION	NO. DATE
DRAWN	PROJECT NO. DATE
JGH	6036-22A 10/27/23