11228 Aurora Avenue Des Moines, Iowa 50322-7905 United States ghd.com



Our reference: 056934-LTR-20

October 30, 2024

Mr. Brian Rath Iowa Department of Natural Resources Wallace State Office Building 502 E. 9th Street Des Moines, Iowa 50319

Fall 2024 Semi-Annual Engineering Inspection Viking Pump Foundry Sand Landfill Permit No. 7-SDP-12-89P-FSL

Dear Mr. Rath:

This letter serves as a semiannual report of the engineering inspection which follows the scope and format of previous reports. The Fall 2024 semiannual engineering inspection of the Viking Pump (Viking) Foundry Sand Landfill (landfill) located in Cedar Falls, Iowa was conducted by GHD on October 10, 2024.

The following sections summarize the observations made during the inspection and recommendations made to Viking. Attachment 1 provides select photographs from the inspection.

1. Weather conditions

The weather was sunny and breezy. The air temperature was approximately 50 degrees Fahrenheit during the inspection. There was no significant precipitation events in the weeks prior to the inspection.

2. Permits and plans

A Construction Completion Report for the landfill was submitted to the Iowa Department of Natural Resources (IDNR) in November 2014. A revised permit was issued by the IDNR on December 8, 2021 and expires December 8, 2024. A permit renewal application was submitted on June 17, 2024.

The current Viking contact for the permit is:

Mr. Evan Arachikavitz, earachikavitz@idexcorp.com, 319-222-2428

3. Access roads

The gravel access roads constructed in late 2023 remain in good condition. The access road into the site remains free of foundry sand. The hammer head turnouts appear to be providing sufficient access for vehicle turning.

The Power of Commitment

4. Equipment and manpower

Viking contracts with Wapsie Pines Lawn Care & Landscaping. to use a dozer and sheepsfoot roller for breaking down foundry sand blocks, spreading, and leveling at the foundry sands. The following individuals at Viking are certified landfill operators and supervise operation of the landfill:

- Chris Newby
- Randy Hansen
- Evan Arachikavitz

Randy Hansen is the responsible official.

5. Landfill operations

As specified in the approved Operations Plan, soil cover is not placed on the landfill. No problems with dust generation, runoff, or erosion outside the fill area were noted at the time of the inspection.

Foundry sand blocks are placed along the gravel access roads. The large blocks of foundry sand are occasionally crushed as required for continued landfill operation. During the inspection, all foundry sand was observed within the landfill berm. No operations were observed during the inspection.

The trees planted around the landfill were inspected. Previously damaged trees have been removed. Although drought conditions returned, the remaining trees appear to be generally healthy. Trees along the east property line (east of the drainage channel) appeared to have damage low but were healthier at their crowns.

6. Drainage structures

The landfill areas with final cover on the north and west sides of the landfill flow to the unnamed ditch west of the landfill. Surface water from the east flows to the south and leaves the site at Viking Road. No erosion in drainage pathways was observed. Vegetation has been established and is in good condition.

The site was dry at the time of inspection. Normally moist-to-wet areas were dry. The stormwater basin located east of the access road had been mowed, providing evidence of the dry conditions. No water was identified in drainage channels or discharging from the stormwater basin. The dry conditions led to brown grass, but good cover was evident. Several areas were also reseeded and matted since the April inspection.

7. Signage

A new entrance sign was placed in 2021 and remains in good condition.

8. Leachate control

The landfill has one collection sump. Leachate is pumped to the Viking sanitary sewer and discharged to the City of Cedar Falls under a discharge permit with the City of Cedar Falls. Viking provides quarterly discharge reports to the City of Cedar Falls that address flows and parameter concentrations in accordance with its discharge permit. The leachate lab data and copies of the discharge concentrations and flows are also reported to the IDNR in the annual groundwater monitoring reports.

A leachate pump was replaced in September 2023 and appears to be operating correctly. Also in 2023, the telemetry and pump controls were upgraded.

9. Groundwater and surface water monitoring system

The Fal 2024 semiannual groundwater and surface water sampling event was completed by GHD personnel on October 7-9, 2024. All wells in the groundwater monitoring network were functioning properly during the sampling event. There was no surface water in the west drainage ditch, so no surface water sample was collected.

The retaining wall around the area of MW-8 and MW-13 was previously upgraded. There is significant overgrowth in the fill around these wells and maintenance is requested.

10. Summary of landfill inspection form

A copy of the Summary of Landfill Inspection form is provided in Attachment 2.

11. Closing

Should you have any questions or comments, please call me at (515) 414-3934.

Regards,

Uchul How T

Michael Alowitz Senior Engineer

+1 515 414-3934 michael.alowitz@ghd.com

MA/Is/LTR-20

Copy to: Evan Arachikavitz, Viking (via email) Tom McCarthy, IDNR Field Office 1 – Manchester (via email) Margaret Zuckweiler, GHD (via email) Mary Grace Armbrust, GHD (via email)

Summary of Landfill Inspection

| Site: | Viking Pump Foundry Sand Landfill | | |
|--------------------------|---|--|--|
| Address: | 711 Viking Road, Cedar Falls, Iowa 50613 | | |
| Operator: | Chris Newby | | |
| Phone No.: | 319-273-8173 | | |
| Responsible Official: | Randy Hansen | | |
| Company: | Viking Pump, Inc. | | |
| Address: | 406 State Street, P.O. Box 8, Cedar Falls, Iowa 50613 (mailing address) | | |
| Phone No.: | 319-273-8402 | | |
| IDNR Permit No.: | 7-SDP-12-89P-FSL | | |
| IDNR Region: | 1 | | |
| Permit Expiration Date: | 12/8/2024 | | |
| Inspection Date: | 10/10/2024 | | |
| Date of Last Inspection: | 4/1/2024 | | |
| Daily Waste Tonnage: | 20 average | | |
| | | | |

Problems Noted?

Yes No Weather Conditions Х Permit and Plans Х Roads Х Equipment/Manpower Х Landfill Operations Х Drainage Structures Х Leachate Control Х GW and SW Monitoring System Х

Description

No surface water observed

| Michael Alowitz | 10/10/2024 | | |
|----------------------|--|--|--|
| Inspector | Date | | |
| MICHAEL J. | I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa. | | |
| ALOWITZ EER 18160 | Michael Alowitz, P.E. Date | | |
| | License Number:18160My license renewal date is:December 31, 2024 | | |
| | | | |

Pages or sheets covered by this seal:

Entire document

Attachment 1 Photo Log

Site Photographs (October 10, 2024)



Photo 1. View of access road into landfill (looking northeast). All foundry sand is contained in the designated fill areas.



Photo 2. West side of landfill (looking north) at edge of closed section showing recently reseeded and matted area.

Site Photographs (October 10, 2024)



Photo 3. Dry conditions at MW-15. There is typically some surface water at this location upgradient of SW-1.



Photo 4. East drainage looking north toward MW-14. The channel was dry.

Site Photographs (October 10, 2024)



Photo 5. View looking south from top of north side of landfill. Looking toward active filling areas.



Photo 6. Looking southeast over previously crushed foundry sand with staged molds placed along the gravel access road shown to the right.

Attachment 2

Summary of Landfill Inspection

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| Date of Last Inspection: | 4/1/2024 | | |
| Daily Waste Tonnage: | 20 average | | |

Problems Noted?

| | Yes | No |
|-----------------------------|-----|----|
| Weather Conditions | | Х |
| Permit and Plans | | Х |
| Roads | | Х |
| Equipment/Manpower | | Х |
| Landfill Operations | | Х |
| Drainage Structures | | Х |
| Leachate Control | | Х |
| GW and SW Monitoring System | | Х |

Description

No surface water observed

| Michael Alowitz | 10/10/2024 | |
|-----------------|--|---|
| Inspector | Date | - |
| | me or under my direct supe | neering document was prepared by rvision and that I am a duly licensed r the laws of the State of Iowa. |
| | Michael Alowitz, P.E. | Date |
| | License Number: | 18160 |
| | My license renewal date is: | December 31, 2024 |
| | Pages or sheets covered by this seal: Entire document | |