

**Our reference:** 12606359-LTR-2

**December 19, 2023**

**Mr. Sam Bennett  
Muscatine Power and Water  
3205 Cedar Street  
Muscatine, Iowa 52761**

### **2023 Landfill Inspection Letter Report**

Dear Mr. Bennet:

This letter serves to document observations and recommendations based on a site visit to the Muscatine Power and Water (MPW) Coal Combustion Residue (CCR) Landfill on July 18, 2023. Participants in the site visit included Sam Bennett (MPW), Neil Hoskins (MPW), Mike Alowitz (GHD), Justin Simon (GHD), and Mary Grace Armbrust (GHD).

Landfill operations are permitted under Iowa Department of Natural Resources Operating Permit #70-SDP-06-82P with an expiration date of August 10, 2030. The inspection included driving around the perimeter road, walking selected slope areas, viewing of ponds and piping infrastructure, and observation of the fill area. There were no active landfill operations during the inspection.

In general, the landfill appears to be in good operating condition.

- CCR was observed within the permit limits and infrastructure for managing stormwater around the perimeter and in the active fill area appeared intact.
- The temporary cover areas and most of the permanent cover areas appeared to be in good repair with only minor areas of limited vegetation.
- Access roads were readily drivable and appeared be sufficient for all-weather travel.

Two specific areas of concern were identified:

- The leachate transfer manhole appeared to have a high level of leachate and the discharge pump was not functional. MPW personnel indicated maintenance personnel would be assigned to address the pumping situation.
- There was encroaching woody vegetation on the north-northeast portions of the landfill cover. The woody vegetation should be cut back to allow regular mowing. The root systems of woody vegetation can compromise cap integrity. Regular mowing will limit the potential growth of woody vegetation.

On capped areas, it appeared the vegetation was fairly tall which gives the opportunity for woody vegetation to grow and potentially obscure hazards such as rip rap protection. A general recommendation is to increase the mowing frequency.

Select photographs collected during the inspection area presented in Attachment A.

Overall, the landfill appears to be well managed and operating in compliance with the Operating Permit.

Regards,



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Copy to: Jean Brewster, MPW  
Neil Hoskins, MPW

# **Attachment 1**

**Photographs**

## Site Photographs



**Photo 1**      *Active fill area in foreground. Pond system in the background.*



**Photo 2**      *Example rock check dam with vegetative infill.*



**Photo 3** *Example gravel road and final cover vegetative growth.*



**Photo 4** *Example woody vegetation encroaching up slope. Photograph is near stormwater bypass conveyance.*