

June 14, 2024
File No. 27223203.00

Mr. Brad Davison
Iowa Department of Natural Resources
Land Quality Bureau
6200 Park Avenue
Des Moines, Iowa 50321

Subject: Monitoring Program Modification Request
Mahaska County Sanitary Landfill
Original/C&D and Meinders/Hartog MSWLF Units
Permit No. 62-SDP-07-93C

Dear Brad:

SCS Engineers, on behalf of the Mahaska County Solid Waste Management Commission, is requesting a modification to the groundwater monitoring program for the closed Original/C&D and Meinders/Hartog municipal solid waste landfill units (closed MSWLF units) at the Mahaska County Sanitary Landfill.

The closure permit for the closed MSWLF units was issued on April 21, 1995 (Doc #27457). Amendment #8 to the closure permit, issued February 26, 2021 (Doc #99859), defined the current monitoring program for the facility. The numbered items from Amendment #8 are included below in italics followed by the requested modifications.

1. Collect groundwater samples annually (in alternating seasons) and analyze for beryllium, cadmium, cobalt, nickel, and total suspended solids (TSS) at monitoring wells MW-1A, MW-2A, MW-8, MW-12, and MW-15. Groundwater samples shall not be field-filtered prior to laboratory analysis and total suspended solids shall be analyzed using Method 1376585 (with a reporting limit goal of ≤ 2 mg/l). Turbidity measurement may be approved by the DNR in lieu of TSS, provided a correlation between the two is established.

The requested modification would change the frequency of groundwater sampling:

1. Collect groundwater samples at monitoring wells MW-1A, MW-2A, and MW-12 in the first year of a two-year cycle and monitoring wells MW-8 and MW-15 in the second year of the two-year cycle and analyze for beryllium, cadmium, cobalt, nickel, and total suspended solids (TSS). These subsets of monitoring wells will continue to be sampled on the two-year cycle until groundwater monitoring is discontinued. Groundwater samples shall not be field-filtered prior to laboratory analysis and total suspended solids shall be analyzed using Method 1376585 (with a reporting limit goal of ≤ 2 mg/l). Turbidity measurement may be approved by the DNR in lieu of TSS, provided a correlation between the two is established.



2. Collect water level and piezometer measurements annually (spring and fall measurement during sampling event).

The requested modification would change the frequency of water level measurements.

2. Collect water level and piezometer measurements during sampling events and measure each well biennially during the second year of the two-year sampling cycle to prepare groundwater contour maps.

3. Landfill gas shall be monitored semi-annually at locations GP-1, GP-2, GP-3, GP-4, MW-1A, MW2A, MW-4A, and MW-15.

No modification is requested for this item.

4. Engineering inspections shall be performed and reported annually in the spring beginning in 2022. The 2021 inspection shall be replaced by an on-site meeting with DNR representatives.

No modification is requested for this item except for removing the reference to the 2021 inspection.

4. Engineering inspections shall be performed and reported annually in the spring beginning in 2022.

5. Results shall be reported in the Annual Water Quality Report.

The requested modification would change the frequency of reporting.

5. Results of the two-year sampling cycle shall be reported biennially.

The 2024 groundwater sampling and reporting will be performed under the current monitoring program. The two-year sampling cycle will begin in 2025. If you have any questions regarding these requested modifications, please contact Nathan Ohrt at (319) 331-9613.

Sincerely,



Nathan Ohrt
Senior Project Professional
SCS Engineers



Timothy C. Buelow, P.E.
Senior Project Advisor
SCS Engineers

NPO/TCB

Copies: Mr. Joe Farris, Mahaska County Solid Waste Management Commission