

October 24, 2025
File No. 27223095.25

Mr. Mike Smith, P.E.
Iowa Department of Natural Resources
Land Quality Bureau
6200 Park Avenue
Des Moines, Iowa 50321

Subject: 2025 Semi-Annual Sampling Notification
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Dear Mike:

SCS Engineers, on behalf of the Northwest Iowa Area Solid Waste Agency, is submitting herewith a summary of the 1st 2025 semi-annual groundwater sampling event for the Northwest Iowa Area Sanitary Landfill (Landfill) in general accordance with the Iowa Administrative Code (IAC) 567-113.10(5) and 113.10(6).

Report Priority

Acetone was detected in monitoring points GU-13 and SW-101 during the July 2024 semi-annual sampling event. In correspondence dated October 2, 2024 (Doc #11100), the Iowa Department of Natural Resources (DNR) approved using the results of the 2nd 2024 semi-annual sampling event as an acetone retest rather than a standalone retesting sampling event. Monitoring point GU-13 was dry during the October 2024 and June 2025 semi-annual sampling events. The results from the next successful sample collection from GU-13 will be used to verify the acetone detection. Acetone was detected in monitoring point SW-101 during the July and November 2024 sampling events. In a telephone conversation, the DNR directed that a sample from the sediment pond that receives the discharge from SW-101 be sampled for acetone to verify the detection of acetone in SW-101. During the April 2025 retesting sampling event, acetone was detected at monitoring point SW-101 at a concentration of 10.4 µg/L, slightly exceeding the reporting limit of 10 µg/L. Acetone was not detected in the sample from the sediment pond discharge. Acetone was not detected in monitoring point SW-101 or the sediment pond discharge during the June 2025 sampling event. The acetone detections in SW-101 do not appear to warrant additional action at this time.

SSIs above background were indicated for copper and zinc in monitoring point GU-14 during the 1st 2023 statistical evaluation. The monitoring point has been dry since the May 2023 sample collection. The next successful sampling attempt of GU-14 will be used as a retest for the indicated SSIs. The elevated total suspended solids (TSS) concentration of 93 mg/L in monitoring point GU-14 may have contributed to the indicated SSIs.

Indicated SSIs during the 2nd 2024 statistical evaluation for cobalt in monitoring well DG-1001 and for acetone in monitoring point GU-15 and arsenic, barium, and acetone in monitoring point GU-13 were attempted in April 2025. The retesting concentration for cobalt in monitoring well DG-1001 was a J flag, so the indicated cobalt SSI was not confirmed. Monitoring points GU-13 and GU-15 did not produce samples during the April and June 2025 sampling events. The next successful sampling attempt for GU-13 and GU-15 will be used as a retest for the indicated SSIs.



Statistical Summary

Groundwater sampling was conducted from June 9 to 11, 2025, and the associated field sheets were completed. The samples were shipped and received at the laboratory in a condition that met the acceptable preservation requirements and at the appropriate temperature. Statistical evaluation was performed using analytical data received from the laboratory. The field sheets, laboratory analytical reports, data validation documentation, and statistical output from the statistical evaluation will be included in the 2025 Annual Water Quality Report.

Statistical evaluation results for the Landfill's 1st 2025 semi-annual sampling event are summarized in Table 1.

Table 1
1st 2025 Statistical Evaluation Summary

Monitoring Point	Monitoring Program	Indicated SSLs	SSLs
UG-90	Background	Background for the detection monitoring program.	
UG-201	Background	Background for the detection monitoring program.	
DG-901	Assessment	None	None
DG-905	Assessment	None	None
DG-1001	Detection	None	-
DG-1005	Assessment	None	None
DG-1101	Assessment	None	None
DG-1105R	Detection	None	-
DG-1201	Assessment	None	None
DG-1205	Assessment	1,1-Dichloroethane, Dichlorodifluoromethane	None
DG-1301	Corrective Action	1,1-Dichloroethane, cis-1,2-Dichloroethene, Trichloroethene	Trichloroethene*
DG-1305	Assessment	None	None
DG-1401R	Assessment	1,1-Dichloroethane	None
DGP-1500	Corrective Action	Arsenic, Benzene, Bis[2-ethylhexyl]phthalate, Sulfide	Arsenic
TDG-301	Detection	None	-
TDG-305	Detection	None	-
GU-9	Detection	Not applicable (dry)	-
GU-10	Detection	Not applicable (dry)	-
GU-11	Detection	Not applicable (dry)	-
GU-12	Detection	Not applicable (dry)	-
GU-13	Detection	Not applicable (dry)	-
GU-14	Detection	Not applicable (insufficient water)	-
GU-15	Detection	Not applicable (insufficient water)	-
SW-101	Detection	None	-

* - The lower confidence limit is below the GWPS.

There were 10 well/detected constituent pairs with indicated SSLs above background. The monitoring wells in the assessment and corrective action monitoring do not require retesting; therefore, the SSLs were not confirmed. Sulfide was initially detected in monitoring well DGP-1500 during this reporting period. In a telephone conversation on September 29, 2025, the DNR approved using the results of the 2nd 2025 sampling event as a verification sample for sulfide in DGP-1500, rather than conducting a standalone verification sampling event.

The exceedances of the groundwater protection standards (GWPSs) at statistically significant levels (SSLs) for monitoring wells DG-1301 and DGP-1500 were previously reported.

For monitoring points in the corrective action monitoring program, if the upper confidence limit or any part of the upper confidence band, as appropriate, exceeds the GWPS, the constituent-monitoring point pair would not satisfy the requirement to complete corrective action as specified in IAC 567-113.10(9)"e"(2), which requires three consecutive years of the upper confidence limit or upper confidence band, as appropriate, below the GWPS. The progress of constituent-monitoring point pairs toward satisfying the requirements is shown in Table 2.

Table 2
Progress Toward Remedy Completion

Monitoring Well	Current SSL Above GWPS	Upper Confidence Limit Below GWPS					
		1 st Year		2 nd Year		3 rd Year	
DG-1301	Trichloroethene	NA	NA	NA	NA	NA	NA
DGP-1500	Arsenic	NA	NA	NA	NA	NA	NA

NA indicates that the monitoring well/constituent dataset has not satisfied the statistical requirements of IAC 567-113.10(9)"e"(2), which is identified by the entire confidence interval or any portion of the upper confidence band, as appropriate, being below the GWPS.

No changes to the Landfill's monitoring program are recommended based on the results from the 1st 2025 semi-annual sampling event.

Services were performed in general accordance with IAC 567-113.10 and the current requirements for implementing the HMSP at the site. This correspondence constitutes the 2025 Spring Sampling Notification.

If you have any questions regarding this notification, please contact Nathan Ohrt at (319) 331-9613.

Sincerely,



Nathan Ohrt
Senior Project Professional
SCS Engineers

NPO/SAM

Copies: Mr. Brent Kach, Northwest Iowa Area Sanitary Landfill



Sean Marczewski
Senior Project Professional
SCS Engineers