

OR

PROJECT: Des Moines Co, FY24 Env Comp, IA 27223154.24 DATE: 11/25/2024

SUBJECT: Des Moines County Regional Sanitary Landfill - 29-SDP-01-76P - Semi-Annual Sampling Notification TRANSMITTAL ID: 00005

PURPOSE: For Record VIA: Info Exchange

FROM

NAME	COMPANY	EMAIL	PHONE
Ben Madson OR	SCS Engineers	BMadson@scsengineers.com	

TO

NAME	COMPANY	EMAIL	PHONE
Geoffrey Spain United States		geoffrey.spain@dnr.iowa.gov	

REMARKS: Good afternoon:

SCS Engineers, on behalf of the Des Moines County Regional Solid Waste Commission, is submitting the 2024 Semi-Annual Sampling Notification for the Des Moines County Regional Sanitary Landfill, permit number 29-SDP-01-76P. If you have any comments or questions regarding the submittal, please contact me at bmadson@scsengineers.com or (515) 776-9255.

Thank you,

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COPIES:

Becky Jolly
 Chris Ball (Des Moines County)
 Eric Houtz (Des Moines County)
 Jeff Phillips (SCS Engineers)

November 22, 2024
File No. 2722315.24

Mr. Geoff Spain
Iowa Department of Natural Resources
Land Quality Bureau
6200 Park Ave, Suite 200
Des Moines, Iowa 50321

Subject: 2024 Semi-Annual Sampling Notification
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Dear Geoff:

SCS Engineers, on behalf of the Des Moines County Regional Solid Waste Commission, submits herewith a summary of the 1st 2024 semi-annual groundwater sampling event for the Des Moines County Regional Sanitary Landfill (Landfill) in general accordance with the Iowa Administrative Code (IAC) 567-113.10(5) and 113.10(6).

Groundwater sampling was completed June 11-13, 2024, and the associated field sheets were completed. The samples were shipped and received at the laboratory with acceptable preservation requirements, with the exception of the duplicate sample MW-D, and at appropriate temperatures. The metal sample for the duplicate sample MW-D was received with insufficient preservation at a pH of >2; the sample was preserved to the appropriate pH in the laboratory. The 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 2024 Annual Water Quality Report.

Statistical evaluation results for the Landfill's 1st 2024 semi-annual sampling event are summarized in Table 1.

Table 1
1st 2024 Statistical Evaluation Summary

Monitoring Point	Monitoring Program	Indicated SSLs	SSLs
MW-1-99	Assessment	Cobalt	None
MW-2-93	Assessment	Barium, 1,1-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene	None
MW-4-90	Corrective Action	Arsenic, Cobalt, Toluene	Cobalt
MW-4-93	Corrective Action	Arsenic, Cobalt, Nickel, Vanadium, 1,1-Dichloroethane, 1,4-Dichlorobenzene, Chlorobenzene	Cobalt
MW-7-90R	Corrective Action	Arsenic, Barium	Arsenic
MW-7-93	Corrective Action	Cobalt, Nickel	Cobalt
MW-37	Corrective Action	Cobalt, Nickel, 1,1-Dichloroethane, 1,1-Dichloroethene, Benzene, Chlorobenzene, Chloroethane, cis-1,2-Dichloroethene	Cobalt
MW-38	Assessment	Barium	None



Monitoring Point	Monitoring Program	Indicated SSIs	SSLs
MW-39R	Corrective Action	Cobalt, Nickel, 1,1-Dichloroethane, Benzene, cis-1,2-Dichloroethene, Trichloroethene, Vinyl Chloride	Alpha-BHC
MW-40R	Detection	None	-
MW-41	Detection	Inward Gradient (no sample required)	-
MW-43	Corrective Action	Arsenic, Barium, Cobalt, Nickel	None
PZ-10	Corrective Action	Arsenic, Barium, Cobalt, Copper, Lead, Nickel, Vanadium, 1,4-Dichlorobenzene, Benzene, Chlorobenzene	Cobalt
PZ-11	Detection	Inward Gradient (no sample required)	-
GW-Lagoon-00	Detection	Not available*	-
GW-Lagoon-Cell 1W	Detection	Not available*	-

* Monitoring point was dry, therefore statistical analyses were not performed during this sampling event.

There were forty-eight well/detected constituent pairs with indicated statistically significant increases (SSIs) above background. The monitoring wells in assessment monitoring and corrective action do not require a retest; therefore, the SSIs were not confirmed.

The exceedances of the groundwater protection standards (GWPSs) at statistically significant levels (SSLs) identified in Table 1 were previously reported. No new SSLs above a GWPS were measured during the 1st 2024 statistical evaluation.

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 Completeness

Monitoring Point	Historical or Current SSL Above GWPS	Upper Confidence Limit Below GWPS					
		1 st year		2 nd Year		3 rd Year	
MW-4-90	Cobalt	NA	NA	NA	NA	NA	NA
MW-4-93	Cobalt	NA	NA	NA	NA	NA	NA
MW-7-90R	Arsenic	NA	NA	NA	NA	NA	NA
MW-7-93	Cobalt	NA	NA	NA	NA	NA	NA
MW-37	Cobalt	NA	NA	NA	NA	NA	NA
MW-39R	Alpha-BHC	NA	NA	NA	NA	NA	NA
PZ-10	Cobalt	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 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 2024 semi-annual sampling event.

Geoff Spain
November 22, 2024
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Services were performed in general accordance with IAC 567-113.10 and the current requirements for implementation of the HMSP for the site. This correspondence constitutes the 2024 Semi-Annual Sampling Notification.

If you have any questions regarding this notification, please contact Ben Madson at (515) 776-9255.

Sincerely,



Benjamin Madson
Staff Professional
SCS Engineers



Nathan Ohrt
Senior Project Professional
SCS Engineers

BJM/NPO

Copies: Mr. Chris Ball, Des Moines County Solid Waste Commission
Ms. Becky Perry, Des Moines County Solid Waste Commission
Mr. Eric Houtz, Des Moines County Landfill