

May 20, 2021

Mr. Geoffrey Spain
Land Quality Bureau
Iowa Department of Natural Resources
502 East 9th Street
Des Moines, Iowa 50319-0034



**RE: 2021 Semi-Annual Water Quality Notification Letter
Ida County Sanitary Landfill 47-SDP-01-76C**

Dear Mr. Spain:

Hydrologic Monitoring System Plan (HMSP)

At the Ida County Sanitary Landfill, the following monitoring wells are the upgradient/background wells for the facility: MW-3. Since there is only a single background well for this site, the background may not be representative and may not include effects of spatial variability. For this reason, the site water quality is evaluated by both interwell and intrawell statistical methods.

The following downgradient monitoring points are in the detection monitoring system: MW-3, MW-10, and MW-13.

The following downgradient wells are in the assessment monitoring system: MW-7 and PZ-11.

Notification of Results of Spring Sampling, Analysis, and Statistical Evaluation

Wells in the Detection Monitoring System

A. Interwell Statistical Evaluation

Verified Prediction Limit Exceedances (SSI) for **inorganic** compounds:
None.

Verified Prediction Limit Exceedances (SSI) for **VOC** include:
None.

B. Intrawell Statistical Evaluation

Verified Prediction Limit Exceedances (SSI) for **inorganic** compounds:
None.

Wells in the Assessment Monitoring System

A. Interwell Statistical Evaluation

Verified Prediction Limit Exceedances (SSI) for **inorganic** compounds:
MW-7 – Cobalt, Nickel
PZ-11 – None.

Verified Prediction Limit Exceedances (SSI) for **VOC** include:
MW-7 – Chlorobenzene, cis-1,2-Dichloroethene
PZ-11 – bis(2-ethylhexyl)phthalate

B. Intrawell Statistical Evaluation

Verified Prediction Limit Exceedances (SSI) for **inorganic** compounds:
None.

As reported in the 2020 Annual Water Quality Monitoring Report (AWQR), dichlorofluoromethane at MW-7 and bis(2-ethylhexyl)phthalate at PZ-11 should continue to be sampled on a semi-annual basis. There are no other on-going requirements to sample for any additional Appendix I or Appendix II compounds during semi-annual monitoring events based on historic sampling data. Further, the frequency of the annual requirement for Appendix II sampling has been reduced to once per five (5) years.

Since the detected concentration of cobalt (2.7 ug/L) does not exceed both the interwell prediction limit (1.6 ug/L) and the intrawell control limit for cobalt (13.1743 ug/L), the detection is not considered a statistically significant increase (SSI) and therefore does not warrant evaluation of the 95% LCL for cobalt at MW-7.

Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	Control Limit (ug/L)	95% LCL (ug/L)	GWPS (ug/L)
MW-7	Cobalt	2.7	1.6	13.1743	2.471	2.1
MW-7	Nickel	65.5	15.6	195.8150	63.235	100.0

Wells returning to the detection monitoring system

None.

This notification is intended to satisfy requirements of Iowa Administrative Code (IAC) 567-113.10(5)"c"(1); 113.10(6)"d"(1); and 113.10(6)"g".

The water quality results for the Spring of 2021 will be fully evaluated in the Annual Water Quality Report in accordance with the permit and IAC 567-113.10(10).

Please feel free to contact our office at (515) 733-4144 with any questions you may have.

Sincerely,

HLW Engineering Group



Todd Whipple, CPG
Project Manager

cc: Lorna Steenbock, County Auditor
Cindy Turkle, Turkle-Clark Environmental Consulting

STATISTICAL ANALYSIS
FOR THE
IDA COUNTY SANITARY LANDFILL

First Semi-Annual Monitoring Event in 2021

Prepared for:
Ida County Sanitary Landfill
Ida County, IA

Prepared by:
Jeffrey A. Holmgren
Otter Creek Environmental Services, LLC
40W565 Foxwick Court
Elgin, IL 60124
(847) 464-1355

May 2021
