May 13, 2026

Ms. Alexis Slade, Environmental Engineer
Iowa Department of Natural Resources
6200 Park Avenue, Suite 200
Des Moines, Iowa 50321

HLW Engineering Group
Engineering Management

RE: 2026 Spring - Water Quality Notification Letter
Northern Plain Regional Landfill 74-SDP-02-76P

Dear Mr. Spain:

HMSP
At the Northern Plains Regional Landfill, the following monitoring wells are the upgradient/background wells for the facility: MW-11, MW-12, MW-13, MW-17, MW-18, MW-19, MW-20, and MW-21.

The following downgradient monitoring points remain in the detection monitoring system: MW-9, GU-1, and GU-2.

The following downgradient monitoring points are in the assessment monitoring system: MW-3AR, MW-6B, MW-7A, MW-7B, MW-10, MW-15, and MW-16.

The following downgradient monitoring points are Point of Compliance Corrective Action Monitoring Wells: MW-8 and MW-14.

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

Wells in the Detection Monitoring System
Prediction Limit exceedances **for inorganic** compounds:
None.
Prediction Limit exceedances **for VOC** include:
None.

Wells in the Assessment Monitoring System
Prediction Limit exceedances **for inorganic** compounds:
MW-3AR – cadmium, copper
MW-6B - selenium
MW-7A – nickel
MW-7B – none
MW-10 – cadmium
MW-15 – nickel
MW-16 – none
Prediction Limit exceedances **for VOC** include:
None.

Wells in the Corrective Action Monitoring System
Prediction Limit exceedances **for inorganic** compounds:
MW-8 – arsenic, barium, cadmium, copper
MW-14 -None
Prediction Limit exceedances **for VOC** include:
None.

Historic Appendix II Compound Detections

The tables that follow summarize Appendix II detections (beyond the Appendix I compound list). Green highlights indicate full Appendix II sample collection events.

bis(2-ethylhexyl)phthalate (ug/L)

Date	MW-3AR	MW-6B	MW-7A	MW-7B	MW-8	MW-10	MW-14	MW-15	MW-16
6/9/09	NT	NT	<10	<10	<10	NT	<10	<10	NT
10/29/09	NT	NT	<10	<10	<10	NT	<8	<8	NT
4/19/10	NT	NT	NT	NT	NT	NT	<10	<10	NT
10/20/10	NT	NT	<10	<10	<10	NT	NT	NT	NT
10/31/11	**10.0**	NT	NT	NT	NT	NT	NT	NT	NT
4/25/12	**10.0**	NT	NT	NT	NT	NT	NT	NT	NT
4/15/13	<10.	NT	NT	NT	NT	NT	NT	NT	NT
8/9/13	<10.	NT	NT	NT	NT	NT	NT	NT	NT
4/7/14	<10.	NT	NT	NT	NT	NT	NT	NT	NT
10/23/14	<10.	NT	NT	NT	NT	NT	NT	NT	NT
4/2/15	NT	NT	<10	<10	<10	NT	<10	<10	NT
10/26/15	<10.	NT	Dry	NT	NT	NT	NT	NT	NT
4/1/16	<10.	NT	NT	NT	NT	NT	NT	NT	NT
10/19/16	<10.	NT	NT	NT	NT	NT	NT	NT	NT
4/17/17	<6	NT	NT	NT	NT	<6	NT	NT	NT
10/11/17	NT	NT	NT	NT	NT	NT	NT	NT	NT
6/01/18	NT	NT	NT	NT	NT	**7.0**	NT	NT	NT
10/3/2018	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/8/2019	NT	**8.0/29.0**	NT	NT	NT	<6	NT	NT	NT
10/11/2019	NT	<6	NT	NT	NT	<6	NT	NT	NT
4/27/2020	NT	**13.0**	<6	<6	<6	<6	<6	**11.0**	NT
10/9/2020	NT	Dry	NT	NT	NT	<6	NT	<6	NT
4/9/2021	NT	<6	NT	NT	NT	NT	NT	<6	NT
10/25/2021	NT	<6	NT	NT	NT	NT	NT	<6	NT
4/11/2022	frozen	<6	NT	NT	NT	NT	NT	NT	**10.0**
10/12/2022	dry	dry	dry	NT	NT	NT	NT	NT	<6
4/6/2023	<6	<6	NT	NT	NT	NT	NT	NT	<6
6/27/2023	NT	NT	NT	NT	NT	NT	NT	NT	NT
10/9/2023	dry	dry	dry	NT	NT	NT	NT	NT	NT
4/4/2024	NT	<6	NT	NT	NT	<6	NT	NT	NT
10/16/2024	NT	dry	dry	NT	NT	NT	NT	NT	NT
4/7/2025	NT	<6	<6	<6	<6	NT	<6	<6	NT
10/20/2025	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/16/2026	NT	NT	NT	NT	NT	NT	NT	NT	NT

Sulfide (mg/L)

Date	MW-3AR	MW-6B	MW-7A	MW-7B	MW-8	MW-10	MW-14	MW-15	MW-16
6/9/09	NT	NT	<0.1	<0.1	<0.1	NT	**0.11**	**0.18**	NT
10/29/09	NT	NT	<0.1	<0.1	<0.1	NT	<0.1	<0.1	NT
4/19/10	NT	NT	NT	NT	NT	NT	**0.4**	<0.1	NT
10/20/10	NT	NT	<0.1	<0.1	<0.1	NT	NT	NT	NT
10/31/11	<0.1	NT	NT	NT	NT	NT	NT	NT	NT
4/25/12	<0.1	NT	NT	NT	NT	NT	<0.1	NT	NT
4/15/13	NT	NT	NT	NT	NT	NT	<0.1	<0.1	NT
8/9/13	NT	NT	NT	NT	NT	NT	<0.1	<0.1	NT
4/7/14	NT	NT	NT	NT	NT	NT	<0.1	<0.1	NT
10/23/14	NT	NT	NT	NT	NT	NT	<0.1	**0.12**	NT
4/2/15	NT	NT	<0.1	<0.1	**0.55**	NT	<0.1	<0.1	NT
10/26/15	NT	NT	Dry	NT	<0.1	NT	<0.1	<0.1	NT
4/1/16	NT	NT	NT	NT	**0.16**	NT	<0.1	**0.11**	NT
10/19/16	NT	NT	NT	NT	<0.1	NT	<0.1	<0.1	NT
4/17/17	<0.1	NT	NT	NT	<0.1	<0.1	<0.1	<0.1	NT
10/11/17	NT	NT	NT	NT	<0.1	NT	<0.1	<0.1	NT
6/01/18	NT	NT	NT	NT	**0.32**	<0.2	<0.2	<0.2	NT
10/3/2018	NT	NT	NT	NT	<0.1	NT	<0.1	<0.1	NT
4/8/2019	NT	<0.1	NT	NT	<0.1	NT	<0.1	<0.1	NT
10/11/2019	NT	NT	NT	NT	<0.1	NT	<0.1	<0.1	NT
4/27/2020	NT	<0.1	<0.1	<0.1	<0.3	NT	<0.1	<0.1	NT
10/9/2020	NT	NT	NT	NT	<0.1	NT	NT	NT	NT
4/9/2021	NT	NT	NT	NT	<0.1	NT	NT	NT	NT
10/25/2021	NT	NT	NT	NT	<0.1	NT	NT	NT	NT
4/11/2022	frozen	NT	NT	NT	NT	NT	NT	NT	**1.8**
10/12/2022	dry	dry	dry	NT	NT	NT	NT	NT	NT
4/6/2023	<0.1	NT	NT	NT	NT	NT	NT	NT	<1.5
10/9/2023	dry	dry	dry	NT	NT	NT	NT	NT	NT
4/4/2024	NT	NT	NT	NT	NT	<0.3	NT	NT	NT
10/16/2024	NT	dry	dry	NT	NT	NT	NT	NT	NT
4/7/2025	NT	<0.1	<0.1	<0.1	<0.3	NT	<0.3	<0.3	NT
10/20/2025	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/16/2026	NT	NT	NT	NT	NT	NT	NT	NT	NT

NT = Not tested
= Full Appendix II Sample Collected

Current Appendix II Compound Detections

None.

SSL Evaluation

VOC

All 95% LCL values for verified VOC compounds at assessment monitoring wells are below the Statewide Standards published in IAC 567, Chapter 137. No SSL for VOC are recorded at the HMSP wells.

Inorganics

The instances where the 95% LCL for inorganic compounds exceeded the applicable GWPS are limited to historic cobalt at MW-14 (4/17/17) and historic arsenic at MW-8 (6/23/21). Confidence Interval Assessment Tables for MW-8 and MW-14 are included in Attachment A.

MW-14 - The limits of the impact beyond MW-14 was previously determined. A Final Field Characterization/Delineation of Plume Report was submitted January 17, 2014 (Doc #79350) and was approved November 4, 2014 (Doc# 81707). MW-14A was installed as a step-out well to define the limits of impact east of MW-14. The water testing at MW-14A on March 30, 2012 indicated that cobalt was undetected and reported as below the method detection limit of 0.004 mg/L. MW-14A was properly abandoned on August 9, 2013.

MW-14 is located immediately downgradient of the leachate toe drain and within 50 feet of the toe drain system. MW-14 is utilized as the Point of Compliance Corrective Action Monitoring Point. MW-14 is also positioned as a step-out well to the corrective action system.

The 95% UCL for cobalt at MW-14 dropped below the site-specific GWPS (4.0 ug/L) in April 2024 and has remained below the GWPS since then. MW-14 should remain in Corrective Action Monitoring at least through 2026.

MW-8 - The limit of the impact beyond MW-8 was previously determined. A Final Field Characterization/Delineation of Plume Report was submitted January 17, 2014 (Doc# 79350) and was approved November 4, 2014 (Doc# 81707). The ACM Report for MW-8 was submitted February 25, 2022 (Doc # 102431) and was approved by IDNR in the Revised Permit dated May 16, 2022 (Doc 103233). Selection of the Remedy was made in April 2023 with notice filed with IDNR April 21, 2023 (Doc #106432). The corrective measures were completed in November 2023 and consist of vents in the landfill cap and grading of the site along the south side of the original landfill.

MW-8 is located immediately downgradient of the 2023 corrective action and is utilized as the Attenuation Zone Point of Compliance Point.

The 95% UCL for arsenic at MW-8 remains above the GWPS. MW-8 should remain in Corrective Action Monitoring.

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 2026 will be fully evaluated in the Annual Water Quality Report in accordance with the unnumbered permit amendments dated May 22, 2013, July 10, 2014, 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: Mark White, Public Works Director
Dan Chism, Superintendent
Jim Thiesse, KCN

Attachment A

Confidence Limit Assessment

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Northern Plains Regional Landfill
Permit No. 74-SDP-02-76P

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-14	cobalt	4/1/2016	9.4	1	4.481	9.119	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	10/19/2016	4.1	1	4.01	9.24	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	4/17/2017	9.2	1	4.552	10.348	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	10/11/2017	4.6	1	3.453	10.197	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	6/1/2018	5.4	1	3.104	8.546	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	10/3/2018	3.1	1	2.519	8.631	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	4/8/2019	4.7	4	3.312	5.588	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	10/11/2019	3.2	4	2.766	5.434	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	4/27/2020	5.6	4	2.724	5.576	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	10/9/2020	2.4	4	2.278	5.672	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	4/9/2021	1.3	4	0.979	5.271	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	10/25/2021	1.1	4	0.153	5.047	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	4/11/2022	3.1	4	0.866	3.084	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	10/12/2022	4.1	4	0.698	4.102	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	4/6/2023	0.9	4	0.468	4.132	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	10/9/2023	2.1	4	0.939	4.161	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	4/4/2024	<0.4	4	0.000	3.834	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	10/16/2024	1.7	4	0.230	2.220	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	4/7/2025	<0.4	4	0.000	2.220	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	10/20/2025	2.3	4	0.000	2.356	**4.0***	10/19/2016	NA	6/1/2018
MW-14	cobalt	4/16/2026	0.699	4	0.107	2.342	**4.0***	10/19/2016	NA	6/1/2018

Table 7
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Permit No. 74-SDP-02-76P

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-8	arsenic	4/1/2016	63.5	53.7	44.148	115.402	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	10/19/2016	107	53.7	46.283	108.267	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	4/17/2017	55.9	53.7	51.294	107.056	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	10/11/2017	47.2	53.7	37.133	99.667	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	6/1/2018	32.5	53.7	22.569	98.731	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	10/3/2018	9.7	53.7	12.556	60.094	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	4/8/2019	33.1	53.7	12.374	48.876	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	10/11/2019	75.7	53.7	5.349	70.151	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	4/27/2020	56.2	49.3	10.069	77.281	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	10/9/2020	72.9	49.3	36.446	82.504	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	4/9/2021	95.1	49.3	56.224	93.726	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	6/23/2021	57.7	49.3	54.829	86.121	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	10/25/2021	125	49.3	53.279	122.071	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	4/11/2022	220	49.3	42.821	206.079	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	10/12/2022	360	49.3	36.516	344.834	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	4/6/2023	31.7	49.3	19.287	349.063	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	10/9/2023	165	49.3	34.306	354.044	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	4/4/2024	30.9	49.3	0.000	329.719	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	10/16/2024	33.5	49.3	0.000	143.489	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	4/7/2025	106	36.5	8.180	159.520	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	10/20/2025	122	34.9	17.004	129.196	**53.7***	10/19/2016	NA	6/1/2018
MW-8	arsenic	4/16/2026	349	35.0199	0.000	313.144	**53.7***	10/19/2016	NA	6/1/2018