



April 22, 2025

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

RE: Response to April 11, 2025 IDNR Letter (Doc #112826)
Northern Plains Regional Landfill
74-SDP-02-76P

Mr. Spain:

The IDNR Letter dated April 11, 2025 (Doc #112826) requested clarification as to whether leachate head level measurements were completed in June of 2024.

Leachate head measurements were collected on May 6, 2024; May 30, 2024; and July 24, 2024 (see attached). The May 30, 2024, measurements were attributed to June 2024, since the three (3) referenced measurement episode spanned a 3-month period at nearly 30-day intervals.

To eliminate confusion moving forward, the monthly measurements will be collected in each of the twelve (12) calendar months. I apologize for the confusion.

Respectfully,
HLW ENGINEERING GROUP

Todd Whipple, CPG
Project Manager

cc: *Mark White, Public Works Director*
Dan Chism, Landfill Manager
Jim Thiesse, P.E., KCN

Northern Plains Regional Sanitary Landfill
Leachate

5/6/2024

Column A Leachate PZ Well No.	Column B	Column C Date Installed	Column D Top of Casing Elevation	Column E Current Condition	Column F Depth to Water from Top (ft)	Column G Measured Depth of PZ from Top (ft)	Column H Standing Liquid in PZ (ft)	Column I Reference Point (ft)	Column J Head Above Liner (ft)	Column K Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	31.10	39.70	8.60	N/A	N/A	1261.42
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.24	30.90	4.66	N/A	N/A	1264.52
4	Original Landfill	Sept. 1994	1290.16	Okay	25.21	36.80	11.59	N/A	N/A	1264.95
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	27.80	26.95	-0.85	N/A	N/A	1255.20
7	Original Landfill	Sept. 1994	1285.41	Okay	25.60	29.91	4.31	N/A	N/A	1259.81
8	Original Landfill	Sept. 1994	1281.65	Okay	24.48	29.70	5.22	N/A	N/A	1257.17
9	Original Landfill	Sept. 1994	1280.13	Okay	29.89	29.63	-0.26	N/A	N/A	1250.24
10	Original Landfill	Sept. 1994	1290.61	Okay	11.20	27.04	15.84	N/A	N/A	1279.41
11	Original Landfill	Sept. 1994	1290.86	Okay	25.72	37.19	11.47	N/A	N/A	1265.14
12	Original Landfill	Sept. 1994	1289.28	Okay	18.25	19.23	0.98	N/A	N/A	1271.03
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	35.80	34.40	-1.40	-1.50	-2.90	N/A
24	Cell A	N/A	N/A	Okay	30.39	34.00	3.61	0.083	3.693	N/A
25	Cell B	N/A	N/A	Okay	35.81	45.71	9.90	-1.50	8.40	N/A
26	Cell B	N/A	N/A	Okay	34.25	38.00	3.75	0.083	3.833	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	36.21	41.80	5.59	-1.50	4.090	N/A
28	Cell C	Mar-14	N/A	Okay	37.49	41.20	3.71	0.083	3.793	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.500	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	45.80	45.60	-0.20	0.083	-0.117	N/A
31	Cell D2	Jun-17	N/A	Okay	30.05	29.8	-0.25	-1.50	-1.750	N/A
32	Cell D2	Jun-17	N/A	Okay	29.30	29.1	-0.20	0.083	-0.117	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

5/30/2024 (FOR JUNE 24)

Column A Leachate PZ Well No.	Column B	Column C Date Installed	Column D Top of Casing Elevation	Column E Current Condition	Column F Depth to Water from Top (ft)	Column G Measured Depth of PZ from Top (ft)	Column H Standing Liquid in PZ (ft)	Column I Reference Point (ft)	Column J Head Above Liner (ft)	Column K Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	37.99	39.70	1.71	N/A	N/A	1254.53
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.24	30.90	4.66	N/A	N/A	1264.52
4	Original Landfill	Sept. 1994	1290.16	Okay	36.80	36.80	0.00	N/A	N/A	1253.36
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	26.92	26.95	0.03	N/A	N/A	1256.08
7	Original Landfill	Sept. 1994	1285.41	Okay	26.95	29.91	2.96	N/A	N/A	1258.46
8	Original Landfill	Sept. 1994	1281.65	Okay	24.05	29.70	5.65	N/A	N/A	1257.60
9	Original Landfill	Sept. 1994	1280.13	Okay	29.89	29.63	-0.26	N/A	N/A	1250.24
10	Original Landfill	Sept. 1994	1290.61	Okay	10.50	27.04	16.54	N/A	N/A	1280.11
11	Original Landfill	Sept. 1994	1290.86	Okay	32.82	37.19	4.37	N/A	N/A	1258.04
12	Original Landfill	Sept. 1994	1289.28	Okay	17.27	19.23	1.96	N/A	N/A	1272.01
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	35.80	34.40	-1.40	-1.50	-2.90	N/A
24	Cell A	N/A	N/A	Okay	32.45	34.00	1.55	0.083	1.633	N/A
25	Cell B	N/A	N/A	Okay	35.93	45.71	9.78	-1.50	8.28	N/A
26	Cell B	N/A	N/A	Okay	36.21	38.00	1.79	0.083	1.873	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	38.05	41.80	3.75	-1.50	2.250	N/A
28	Cell C	Mar-14	N/A	Okay	39.30	41.20	1.90	0.083	1.983	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.500	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	45.80	45.60	-0.20	0.083	-0.117	N/A
31	Cell D2	Jun-17	N/A	Okay	30.05	29.8	-0.25	-1.50	-1.750	N/A
32	Cell D2	Jun-17	N/A	Okay	29.30	29.1	-0.20	0.083	-0.117	N/A

Northern Plains Regional Sanitary Landfill
Leachate

7/24/2024

Column A Leachate PZ Well No.	Column B	Column C Date Installed	Column D Top of Casing Elevation	Column E Current Condition	Column F Depth to Water from Top (ft)	Column G Measured Depth of PZ from Top (ft)	Column H Standing Liquid in PZ (ft)	Column I Reference Point (ft)	Column J Head Above Liner (ft)	Column K Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	39.45	39.70	0.25	N/A	N/A	1253.07
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.24	30.90	4.66	N/A	N/A	1264.52
4	Original Landfill	Sept. 1994	1290.16	Okay	37.33	36.80	-0.53	N/A	N/A	1252.83
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	27.80	26.95	-0.85	N/A	N/A	1255.20
7	Original Landfill	Sept. 1994	1285.41	Okay	26.95	29.91	2.96	N/A	N/A	1258.46
8	Original Landfill	Sept. 1994	1281.65	Okay	23.87	29.70	5.83	N/A	N/A	1257.78
9	Original Landfill	Sept. 1994	1280.13	Okay	29.89	29.63	-0.26	N/A	N/A	1250.24
10	Original Landfill	Sept. 1994	1290.61	Okay	10.45	27.04	16.59	N/A	N/A	1280.16
11	Original Landfill	Sept. 1994	1290.86	Okay	35.99	37.19	1.20	N/A	N/A	1254.87
12	Original Landfill	Sept. 1994	1289.28	Okay	16.35	19.23	2.88	N/A	N/A	1272.93
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	35.80	34.40	-1.40	-1.50	-2.90	N/A
24	Cell A	N/A	N/A	Okay	31.32	34.00	2.68	0.083	2.763	N/A
25	Cell B	N/A	N/A	Okay	35.40	45.71	10.31	-1.50	8.81	N/A
26	Cell B	N/A	N/A	Okay	33.15	38.00	4.85	0.083	4.933	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	35.30	41.80	6.50	-1.50	5.000	N/A
28	Cell C	Mar-14	N/A	Okay	26.50	41.20	14.70	0.083	14.783	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.500	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	45.80	45.60	-0.20	0.083	-0.117	N/A
31	Cell D2	Jun-17	N/A	Okay	30.50	29.8	-0.70	-1.50	-2.200	N/A
32	Cell D2	Jun-17	N/A	Okay	29.30	29.1	-0.20	0.083	-0.117	N/A