



411 6th Avenue SE, Suite 400
Cedar Rapids, IA 52401
(319) 365-9565
foth.com

June 10, 2026

Alexis Slade
Iowa Department of Natural Resources
6200 Park Avenue, Suite 200
Des Moines, IA 50321

Re: Spring 2026 Statistical Notifications
Landfill of North Iowa
Permit No. 17-SDP-01-75P

Dear Alexis Slade:

On behalf of Landfill of North Iowa (LNI), Foth Infrastructure & Environment, LLC (Foth) is submitting the notification and placement of notice in the operating record for the Appendix II constituents detected, statistically significant increases (SSIs) over background, and statistically significant levels (SSLs) over the groundwater protection standard (GWPS) for the April 2026 sampling event at LNI. In accordance with Special Provision X.5.i, the field sampling forms, laboratory reports, and statistical reports will be submitted with the 2026 Annual Water Quality Report (AWQR).

Report Priority

The following request was submitted with the 2025 AWQR (Foth, 2026) and is awaiting Iowa Department of Natural Resources (IDNR) review and approval:

- ◆ Amendment of Permit Special Provision X.2 and the leachate monitoring network by removing LHPZ-6 due to the ongoing issues with entrapped sediment impacting the representativeness of the levels measured. LHPZ-7 continues to monitor leachate head levels at the lowest point of Cell A, Phases I-III.

Summary of the Groundwater Monitoring Network & Sampling Schedules

The groundwater monitoring network and sampling schedules are outlined in Table 1 of Attachment 1. The groundwater monitoring locations are depicted in Figure 1 of Attachment 2.

Details regarding the semiannual event in April 2026 are provided in Table 1. In accordance with Special Provision X.5.o, annual monitoring is scheduled for Fall 2026 at MW-1-89, MW-3-89, MW-4A-89, MW-4B-89, MW-5-89, MW-6-89, MW-11, MW-101B, MW-102A-12, MW-103A-12, MW-104A-12, MW-107A, and MW-108A. Therefore, these locations were not monitored in April 2026.

Quality Assurance/Quality Control Review

The data validation reports will be submitted with the 2026 AWQR. The qualifiers assigned and the overall data quality review are provided in the data validation report. A detailed quality assurance/quality control review will be included in the 2026 AWQR.

Appendix II Detections

The Appendix II constituents detected in the monitoring wells under the assessment and corrective action monitoring programs during the April 2026 sampling event are presented in Table 2 of Attachment 1. As required by 567 IAC 113.10(6)d(1), this data has been placed in the facility operating record.

Note that the April 2026 arsenic concentration in MW-106A-12 was removed from background due to an elevated total suspended solids (TSS) concentration in April 2026. The April 2026 arsenic result at MW-106A-12 will be crossed out in Table 14 of the 2026 AWQR.

Detection Monitoring SSIs

The detection monitoring SSI summary is presented in Table 3 of Attachment 1.

During the Spring 2026 statistical evaluation, no SSIs were identified at GUA-1-2, MW-8A-89, and MW-105A-12. In addition, barium in GUA-1-2 was below the 1 mg/L limit established in the alternate source demonstration approval (IDNR, 2024).

Details regarding the future sampling schedules are provided in Table 1 of Attachment 1.

Assessment and Corrective Action Monitoring SSIs and SSLs

Summaries of the assessment and corrective action monitoring SSIs and SSLs are provided in Tables 4 and 5 of Attachment 1.

No assessment monitoring locations and no new constituents in the corrective action monitoring program have triggered the assessment of corrective measures (ACM) process outlined in IAC 113.10(7), (8), and (9). SSLs over the GWPS remained for arsenic at MW-2A-89 and trichloroethene and vinyl chloride at MW-101A-12. Note that while compliance with the GWPS was not achieved, statistically significant decreasing trends were identified for trichloroethene and vinyl chloride at MW-101A-12.

Details regarding the future sampling schedules are provided in Table 1 of Attachment 1.

References

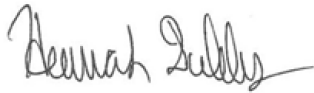
Foth Infrastructure & Environment, LLC, 2026. *2025 Annual Water Quality Report, Landfill of North Iowa, Clear Lake, Iowa, IDNR Permit No. 17-SDP-01-75P, Project I.D.: 26L005.00*. March 31. [Doc. ID 116716].

Iowa Department of Natural Resources (Geoffrey Spain), Letter to Bill Rowland, 25 Jun 2024. "Landfill of North Iowa, Barium Alternate Source Demonstration (Doc #109962), 17-SDP-01-75." [Doc. ID 110307].

Thank you for your attention to this matter. Please contact us at the numbers listed below if you have any questions or need additional information.

Sincerely,

Foth Infrastructure & Environment, LLC



Hannah Dubbs
Project Environmental Scientist
(319) 297-2055



Gina Wilming
Senior Project Manager
(319) 297-2065

cc: William Rowland, Landfill of North Iowa
IDNR Field Office #2

Enclosures

Attachment 1	Tables
Attachment 2	Figure

Attachment 1
Tables

**Table 1
Monitoring Program Implementation Schedule
Spring 2026 Statistical Notifications
Landfill of North Iowa
Permit No. 17-SDP-01-75P**

Monitoring Well	Monitoring Program	Sampling Date and Constituents ^(1,2)	Upcoming Sampling Dates and Constituents ^(1,2)		Full Appendix II Sample Dates	
		Apr. 2026	Fall 2026	Spring 2027	Previously Collected	Next Event
Downgradient Monitoring Locations						
GUA-1	Detection		Appendix I, TSS ⁽³⁾		N/A	N/A
GUA-1-2	Detection	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	N/A	N/A
MW-1-89	Assessment		Appendix II, TSS		Apr. 2009, Apr. 2010, Mar. 2014, Apr. 2019, Oct. 2024	Fall 2029
MW-2A-89	Corrective Action	Appendix II, TSS, MNA ⁽⁴⁾	Appendix II, TSS, MNA ⁽⁴⁾	Appendix II, TSS	Apr. 2009, Apr. 2010, Mar. 2014, Apr. 2019, May 2024	Spring 2029
MW-3-89	Detection		Appendix I, TSS		Apr. 2009, Apr. 2010, Mar. 2014	N/A
MW-4A-89	Detection		Appendix I, TSS		Apr. 2009, Apr. 2010, Mar. 2014	N/A
MW-4B-89	Assessment		Appendix II, TSS		Jul. 2009, Apr. 2010, Mar. 2014, Apr. 2019, Oct. 2024	Fall 2029
MW-5-89	Assessment		Appendix II, TSS		May 2023, Aug. 2023, Nov. 2023, Feb. 2024	Fall 2029
MW-6-89	Detection		Appendix I, TSS		Apr. 2009, Apr. 2010, Mar. 2014	N/A
MW-8A-89	Detection	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	N/A	N/A
MW-9-92	Assessment	Appendix II, TSS	Appendix II, TSS	Full Appendix II, TSS	Jun. 2011, Apr. 2012, Mar. 2017, Apr. 2022	Spring 2027
MW-101A-12	Corrective Action	Appendix II, TSS, MNA ⁽⁴⁾	Appendix II, TSS, MNA ⁽⁴⁾	Appendix II, TSS	Jun. 2012, Oct. 2013, Sep. 2018, Apr. 2024	Spring 2029
MW-102A-12	Assessment		Appendix II, TSS		Jun. 2012, Oct. 2013, Sep. 2018, Nov. 2018, Nov. 2023	Fall 2028
MW-103A-12	Assessment		Appendix II, TSS		May 2023, Aug. 2023, Nov. 2023, Feb. 2024	Fall 2029
MW-104A-12	Assessment		Appendix II, TSS		Oct. 2015, Jan. 2016, Apr. 2016, Mar. 2018, Jun. 2018, Nov. 2023	Fall 2028
MW-105A-12	Detection	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Jan. 2016, Apr. 2016, Apr. 2019, Jul. 2019	N/A
Delineation Monitoring Locations						
MW-11	Delineation		Appendix I VOCs, Arsenic, Barium, MNA ⁽⁴⁾		N/A	N/A
MW-101B	Delineation		Appendix I VOCs		N/A	N/A
MW-107A	Delineation		Appendix I VOCs, Arsenic, Barium, MNA ⁽⁴⁾		N/A	N/A
MW-108A	Delineation		Appendix I VOCs, Arsenic, Barium, MNA ⁽⁴⁾		N/A	N/A
Background Monitoring Locations						
MW-15-10R	Background	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Apr. 2016, May 2021, Apr. 2024	Spring 2029
MW-16-03	Background	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Apr. 2016, May 2021, Apr. 2024	Spring 2029
MW-20-03	Background	Appendix II, TSS, MNA ⁽⁴⁾	Appendix II, TSS, MNA ⁽⁴⁾	Appendix II, TSS	Apr. 2016, May 2021, Apr. 2024	Spring 2029
MW-22A-03	Background	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Apr. 2016, May 2021, Apr. 2024	Spring 2029
MW-23-03	Background	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Apr. 2016, May 2021, Apr. 2024	Spring 2029
MW-106A-12	Background	Appendix II, TSS, MNA ⁽⁴⁾	Appendix II, TSS, MNA ⁽⁴⁾	Appendix II, TSS	Apr. 2016, May 2021, May 2024	Spring 2029

Comments:

MNA = monitored natural attenuation

N/A = not applicable

Table 1
Monitoring Program Implementation Schedule
Spring 2026 Statistical Notifications
Landfill of North Iowa
Permit No. 17-SDP-01-75P

Comments Continued:

TSS = total suspended solids

VOC = volatile organic compound

⁽¹⁾ In accordance with Special Provision X.5.o, MW-1-89, MW-3-89, MW-4A-89, MW-4B-89, MW-5-89, MW-6-89, MW-11, MW-101B, MW-102A-12, MW-103A-12, MW-104A-12, MW-107A, and MW-108A are monitored annually during fall sampling events unless otherwise noted.

⁽²⁾ Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Spring 2026 and will be sampled for Appendix I and detected Appendix II in Fall 2026 and Spring 2027 unless noted otherwise.

⁽³⁾ In accordance with Special Provision X.5.a.ii, the annual compliance monitoring event at GUA-1 is scheduled for Fall 2026.

⁽⁴⁾ MNA indicator parameters were collected in Spring 2026 and will be sampled in Fall 2026 for evaluation in the five-year remedy review cycle due by May 1, 2027.

Table 2
April 2026 Appendix II Detections
Spring 2026 Statistical Notifications
Landfill of North Iowa
Permit No. 17-SDP-01-75P

Constituent	Unit	MW-2A-89 (DwnGrad)	MW-9-92 (DwnGrad)	MW-15-10R (Bkgrnd)	MW-16-03 (Bkgrnd)	MW-20-03 (Bkgrnd)	MW-22A-03 (Bkgrnd)	MW-23-03 (Bkgrnd)	MW-101A-12 (DwnGrad)	MW-106A-12 (Bkgrnd)
1,1-Dichloroethane	ug/L		5.07						6.55	
1,2-Dichloropropane	ug/L								2.5	
Antimony	mg/L	0.00149 J								
Arsenic	mg/L	0.117	0.101	0.0146	0.00417	0.000541 J	0.00147 J	0.0273	0.013	0.0595
Barium	mg/L	0.869	0.849	0.118	0.145	0.073	0.164	0.2	0.898	0.0961
Benzene	ug/L		1.06						0.559	
Chlorobenzene	ug/L								5.36	
Chloroethane	ug/L		2.51 J						0.956 J	
cis-1,2-Dichloroethene	ug/L								15.2	
Cobalt	mg/L	0.00401	0.00584	0.00341	0.0101		0.00209		0.000591	0.00588
Dichlorodifluoromethane	ug/L								1.57 J	
Nickel	mg/L	0.00399 J	0.0145	0.012	0.0401					0.0122
Tetrachloroethene	ug/L								1.13	
Total Suspended Solids	mg/L	37	69	10.8	28	2	5.5	1.25 J	9	48
trans-1,2-Dichloroethene	ug/L								0.463 J	
Trichloroethene	ug/L								6.48	
Vinyl Chloride	ug/L								4.02	
Zinc	mg/L	0.0173 J							0.0315	

Comments:

DwnGrad = downgradient

Bkgrnd = background

⁽¹⁾ The Apr. 2026 total suspended solids (TSS) concentration at MW-106A-12 was above 5 mg/L for acceptable sample quality for background. Due to the high TSS concentration, the Apr. 2026 arsenic concentration at MW-106A-12 was recommended for removal, as it was substantially higher than historical concentrations. Therefore, the Apr. 2026 arsenic result at MW-106A-12 was removed from background and will be crossed out in Table 14 of the 2026 Annual Water Quality Report.

Table 3
Summary of Well/Detected Constituent Pairs With No Previous SSIs
Spring 2026 Statistical Notifications
Landfill of North Iowa
Permit No. 17-SDP-01-75P

Monitoring Location ⁽¹⁾	Constituent ⁽²⁾	Units	Most Recent Result	Background Standard ⁽³⁾
			Apr. 2026	
Detection Monitoring Locations				
GUA-1-2	Arsenic	mg/L	0.0133	0.0405
	Barium	mg/L	0.707	1
	Benzene	ug/L	0.442 J	0.500
	Cobalt	mg/L	0.000637	0.0182
	Nickel	mg/L	0.0154	0.149
	Total Suspended Solids	mg/L	17.3	N/A
MW-8A-89	Arsenic	mg/L	0.00114 J	0.0405
	Barium	mg/L	0.0445	0.606
	Nickel	mg/L	0.00368 J	0.149
	Total Suspended Solids	mg/L	1.38 J	N/A
	Zinc	mg/L	0.0138 J	0.0705
MW-105A-12	Arsenic	mg/L	0.00931	0.0405
	Barium	mg/L	0.3	0.606
	Cobalt	mg/L	0.00683	0.0182
	Nickel	mg/L	0.00645	0.149
	Total Suspended Solids	mg/L	24	N/A

* Current result is above background, if confirmed by retest sample(s) an SSI will be identified (1-of-2 retesting plan).

** Current result is a confirmed SSI. Appendix II sampling was or will be completed within 90 days for compliance locations.

Comments:

mg/L = milligrams per liter

N/A = not applicable

SSI = statistically significant increase over background

ug/L = micrograms per liter

⁽¹⁾ List contains detection monitoring locations sampled in Apr. 2026.

⁽²⁾ List contains constituents detected above the laboratory method detection limit (MDL) and includes J-flagged concentrations.

⁽³⁾ Source of the background standards for the Apr. 2026 results is provided in the Spring 2026 statistical evaluation. The statistical memorandum will be submitted with the 2026 Annual Water Quality Report (AWQR). Compliance for barium in GUA-1-2 was evaluated by comparing the current concentration to the 1 mg/L limit approved by the Iowa Department of Natural Resources (IDNR, 2024).

• No SSIs were identified at GUA-1-2, MW-8A-89, and MW-105A-12 during the Spring 2026 statistical evaluation. In addition, barium in GUA-1-2 was below the 1 mg/L limit established in the alternate source demonstration approval (IDNR, 2024). These locations will remain in the detection monitoring program in Fall 2026. Details regarding the future sampling schedules are provided in Table 1.

Table 4
Summary of Ongoing and Newly Identified SSIs
Spring 2026 Statistical Notifications
Landfill of North Iowa
Permit No. 17-SDP-01-75P

Monitoring Location	Constituent ⁽¹⁾	Units	Most Recent Result ⁽²⁾	Background Standard ⁽³⁾	Lower Confidence Limit	GWPS ⁽³⁾	Sample Dates		
							Initial Exceedance (above background)	Resample	5th Background Sample
Assessment Monitoring Locations									
MW-9-92	1,1-Dichloroethane	ug/L	5.07	1.00	3.5	140	Oct. 2010	Apr. 2011	Oct. 2008
	Arsenic	mg/L	0.101	0.0405	0.0010	0.0461	Apr. 2012	N/S	Oct. 2008
	Barium	mg/L	0.849	0.606	0.24	2	Apr. 2011	Jun. 2011	Oct. 2008
	Benzene	ug/L	1.06	0.500	0.42	5	Jun. 2011	Oct. 2011	Oct. 2008
Corrective Action Monitoring Locations - Assessment Constituents									
MW-2A-89	Barium	mg/L	0.869	0.606	0.91	2	Apr. 2009	N/S	Oct. 2008
MW-101A-12	1,1-Dichloroethane	ug/L	6.55	1.00	9.4	140	Feb. 2012	Apr. 2012	Oct. 2012
	1,2-Dichloropropane	ug/L	2.5	1.00	2.63	5	Feb. 2012	Apr. 2012	Oct. 2012
	Barium	mg/L	0.898	0.606	0.71	2	Apr. 2013	N/S	Oct. 2012
	Benzene	ug/L	0.559	0.500	0.73	5	Apr. 2012	Jun. 2012	Oct. 2012
	Chlorobenzene	ug/L	5.36	1.00	0.5	100	Aug. 2012	Oct. 2012	Oct. 2012
	cis-1,2-Dichloroethene	ug/L	15.2	1.00	29.9	70	Feb. 2012	Apr. 2012	Oct. 2012
	Tetrachloroethene	ug/L	1.13	1.00	1.26	5	Feb. 2012	Apr. 2012	Oct. 2012

* For assessment monitoring locations, all current results are below background. If confirmed by a second event, location may return to detection monitoring in accordance with IAC 113.10(6)e. However, three consecutive events will be utilized to make the determination to return to detection monitoring to limit frequent fluctuation of wells moving between the detection and assessment monitoring program.

** LCL has exceeded the GWPS, this well/constituent pair is now identified as an SSL.

*** Non-MSWLF Unit source of the SSI identified.

Comments:

GWPS = groundwater protection standard

IAC = Iowa Administrative Code

mg/L = milligrams per liter

LCL = lower confidence limit

MSWLF = municipal solid waste landfill

N/S = Not resampled; SSI was declared in lieu of conducting a resample.

SSI = statistically significant increase over background

SSL = statistically significant level over the GWPS

ug/L = micrograms per liter

N/S = Not resampled; SSI was declared in lieu of conducting a resample.

⁽¹⁾ List contains constituents which have been identified as SSIs in Spring 2026. Unless otherwise noted, the current results listed in this table are above background, and SSIs were declared in lieu of conducting a resample.

⁽²⁾ Most recent results are from Apr. 2026.

⁽³⁾ Source of the background standards for the Apr. 2026 results are provided in the Spring 2026 statistical evaluation. The statistical memorandum will be submitted with the 2026 Annual Water Quality Report (AWQR).

Table 4
Summary of Ongoing and Newly Identified SSIs
Spring 2026 Statistical Notifications
Landfill of North Iowa
Permit No. 17-SDP-01-75P

Comments Continued:

- No SSLs were identified for assessment monitoring location MW-9-92 in the Spring 2026 statistical evaluation. The Spring 2026 statistical evaluation did not identify all Appendix II constituents below background for three consecutive sampling events at MW-9-92. Therefore, MW-9-92 will not exit assessment monitoring at this time. Details regarding the future sampling schedules are provided in Table 1.
- No SSLs were identified for the assessment constituents in the corrective action monitoring locations. A summary of the statistical comparisons for the corrective action constituents is provided in Table 5. Details regarding the sampling schedules are provided in Table 1.

Table 5
Summary of Ongoing and Newly Identified SSLs
Spring 2026 Statistical Notifications
Landfill of North Iowa
Permit No. 17-SDP-01-75P

Monitoring Location	Constituent	Units	Most Recent Result ⁽¹⁾	Upper Confidence Limit ⁽²⁾	GWPS ⁽³⁾	Initial Exceedance	Consecutive Compliance Dates		
							1st Occurrence	Most Recent	Duration
Corrective Action Monitoring Locations									
MW-2A-89	Arsenic	mg/L	0.117	0.1370	0.0461	Fall 2009	N/A	N/A	N/A
MW-101A-12	Trichloroethene	ug/L	6.48	6.86	5	Fall 2012	N/A	N/A	N/A
	Vinyl Chloride	ug/L	4.02	2.56	2	Fall 2012	N/A	N/A	N/A

* This well/contaminant pair has been compliant for 3 consecutive years and no longer has an SSL.

** Non-MSWLF Unit source of the SSL identified.

Comments:

GWPS = groundwater protection standard

N/A = not applicable; indicates the analyte/well pair has not achieved compliance with the GWPS; the upper confidence limit or the upper 95% confidence limit on the trend line is above the GWPS.

⁽¹⁾ Most recent results are from Apr. 2026.

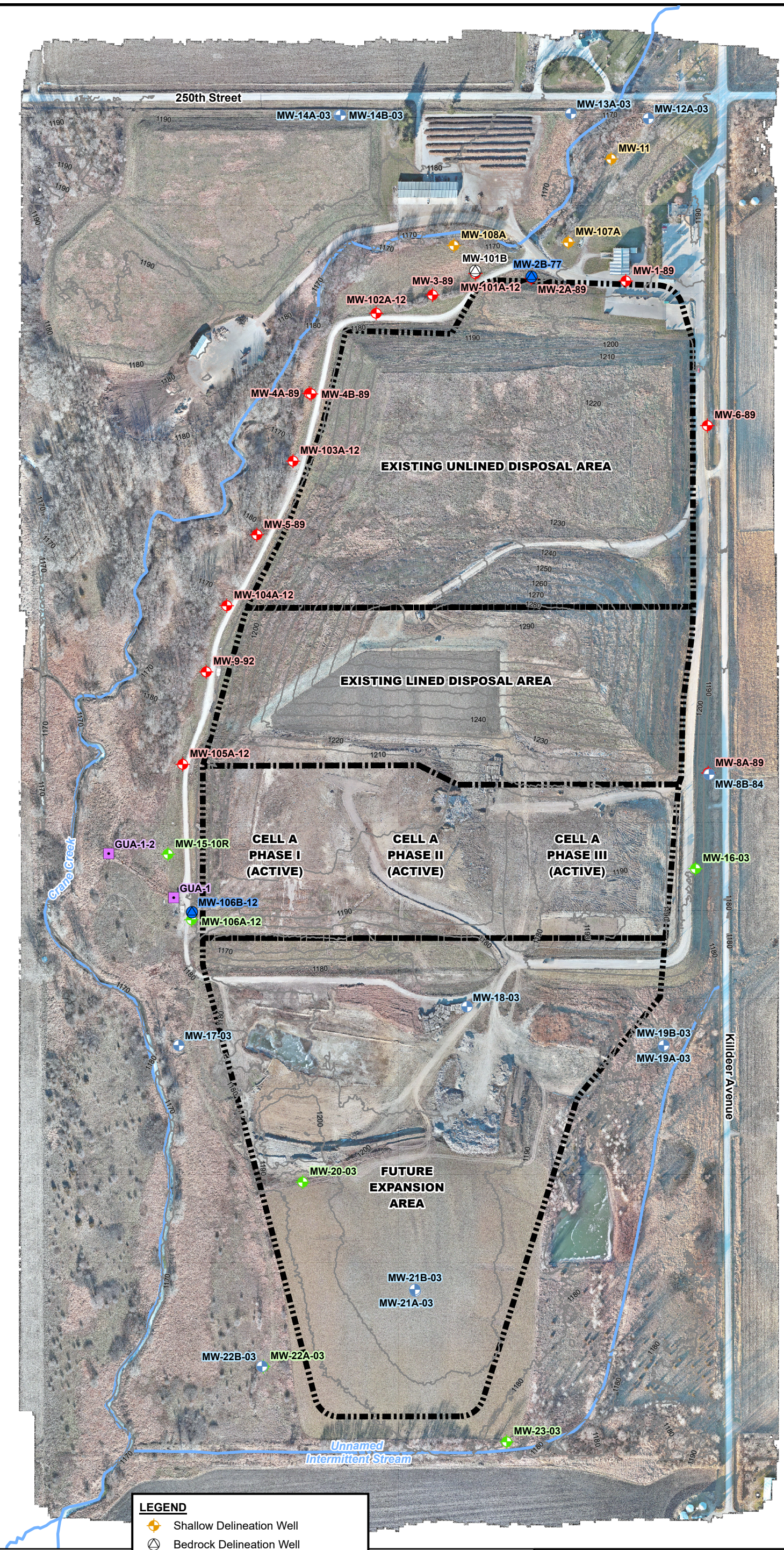
⁽²⁾ If a decreasing trend was identified, the value is the upper 95% confidence limit on the trend line.

⁽³⁾ Source of GWPS values are provided in the Spring 2026 statistical evaluation. The statistical memorandum will be submitted with the 2026 Annual Water Quality Report (AWQR).

- For the corrective action monitoring locations, SSLs over the GWPS remained for arsenic at MW-2A-89 and trichloroethene and vinyl chloride at MW-101A-12. Note that while compliance with the GWPS was not achieved, statistically significant decreasing trends were identified for trichloroethene and vinyl chloride at MW-101A-12.

- No changes are recommended for the corrective action monitoring program based on the corrective action statistical results conducted during the Spring 2026 statistical evaluation. Details regarding the future sampling schedules for MW-2A-89 and MW-101A-12 are provided in Table 1.

Attachment 2
Figure



NOTES:
 1. Date of Aerial Imagery Acquisition: November, 2023.
 2. Coordinate system is: NAD83(2011) Iowa North Zone, US feet. Vertical Datum is NAVD88.

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

LEGEND	
	Shallow Delineation Well
	Bedrock Delineation Well
	Bedrock Water Level Monitoring Well
	Water Level Monitoring Well
	Shallow Monitoring Wells
	Shallow Background Well
	Groundwater Underdrain Locations
	10' Ground Surface Contours
	Waste Boundaries

0 200 400 Feet

LANDFILL OF NORTH IOWA		
FIGURE 1		
GROUNDWATER MONITORING NETWORK		
Date: FEBRUARY 2026	Revision Date:	
Drawn By: DAT	Checked By: GMW	Project: 26L005.00