

July 3, 2025

Mr. Michael Smith, P.E., Environmental Specialist  
Land Quality Bureau  
Iowa Department of Natural Resources  
6200 Park Avenue, Suite 200  
Des Moines, Iowa 50321



**RE: 2025 Spring Water Quality Notification Letter  
Jones County Sanitary Landfill 53-SDP-1-76C**

Dear Mr. Smith:

**Note for Spring 2025**

The laboratory experienced an equipment failure in March 2025, which led to a delay in the reporting of the water quality results. The laboratory digested the metals samples upon receipt at the laboratory but did not analyze the sample until the new equipment was certified by the State laboratory. Any questions related to the emergency equipment replacement should be directed to Microbac Laboratory, Newton, Iowa.

The timeline for reporting for this site is as follows:

Sample collection: April 3, 2025  
Delivery to laboratory: April 4, 2025  
Metals sample digested: April 18, 2025  
Metals Analyses: June 18, 2025  
Results reported by laboratory: June 20, 2025  
Statistical Report Completed: June 26, 2025

The delays consumed 78 calendar days (April 4, 2025 - June 20, 2025).

**HMSP**

At the Jones County Sanitary Landfill, the following monitoring wells are the upgradient/background wells for the facility: MW-12.

The following downgradient well remains in the detection monitoring system: MW-11, MW-16, and MW-20.

The following downgradient wells are in the assessment monitoring system: MW-6.

The following downgradient wells are in the corrective action monitoring system: MW-15 (Supplemental Well) and MW-22 (Attenuation Zone Point of Compliance (AZPOC) Well).

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

### Wells in the Detection Monitoring System

Prediction Limit exceedances **for inorganic** compounds:

MW-16 – zinc\*

*\* A verification sample is required.*

Prediction Limit exceedances **for VOC** include:

None.

### Wells in the Assessment Monitoring System

Prediction Limit exceedances **for inorganic** compounds:

MW-6 - barium

Prediction Limit exceedances **for VOC** include:

MW-6 - None.

### Current Appendix II Compound Detections

MW-6 - None.

### Historic Appendix II Compound Detections (Green highlights = Full Appendix II samples)

#### ***Bis(2-ethylhexyl)phthalate (ug/L)***

***GWPS = 6.0 ug/L***

<b>Date</b>	<b>MW-6</b>	<b>MW-15</b>	<b>MW-22</b>
3/6/2009	<8	<8	<8
4/1/2013	NT	<b>10.0</b>	NT
9/9/2013	NT	<10	NT
3/30/2014	<b>36.0</b>	<b>85.0</b>	NT
9/19/2014	NT	<10	NT
4/20/2015	<10	<10	NT
7/9/2015	<10	NT	NT
10/5/2015	<10	<b>10.0</b>	NT
4/5/2016	<10	<10	<10
10/5/2016	<10	<10	No Sample
4/4/2017	<10	<10	<10
10/3/2017	<b>10.0</b>	<6	<6
4/10/2018	<6	<6	NT
10/12/2018	<6	<6	NT
4/16/2019	<6	<b>10.0</b>	NT
9/30/2019	<6	<6	NT
4/7/2020	<6	<6	NT
10/7/2020	<6	<6	NT
4/22/2021	NT	NT	NT
10/5/2021	NT	NT	NT
4/4/2022	NT	NT	NT
10/5/2022	NT	NT	NT
4/14/2023	NT	NT	NT

10/18/2023	NT	NT	NT
4/8/2024	<b>32.0</b>	NT	NT
10/8/2024	<13	NT	NT
4/3/2025	NT	NT	NT

**Dichlorodifluoromethane (ug/L)**

**GWPS = 1,000.0 ug/L**

<b>Date</b>	<b>MW-6</b>	<b>MW-15</b>	<b>MW-22</b>
3/6/2009	<1	<1	<1
4/1/2013	NT	<1	NT
9/9/2013	NT	NT	NT
3/30/2014	<b>3.5</b>	<b>2.5</b>	NT
9/19/2014	<b>1.3</b>	<1	NT
4/20/2015	<b>1.0</b>	<1	NT
7/9/2015	NT	NT	NT
10/5/2015	<1	<1	NT
4/5/2016	<1	<1	<1
10/5/2016	<b>1.0</b>	<1	No Sample
4/4/2017	<1	<b>1.0</b>	<1
10/3/2017	<1	<1	<1
4/10/2018	<1	<1	NT
10/12/2018	<1	<1	NT
4/16/2019	<1	<1	NT
9/30/2019	<1	<1	NT
4/7/2020	<1	<1	NT
10/7/2020	<1	<1	NT
4/22/2021	NT	NT	NT
10/5/2021	NT	NT	NT
4/4/2022	NT	NT	NT
10/5/2022	NT	NT	NT
4/14/2023	NT	NT	NT
10/18/2023	NT	NT	NT
4/4/2024	<1	NT	NT
10/8/2024	NT	NT	NT
4/3/2025	NT	NT	NT

Wells in the Corrective Action Monitoring System (no longer compliance points)

Prediction Limit exceedances **for inorganic** compounds:

MW-15 - arsenic†, barium, cobalt†, nickel

† Exceeds IAC 567, Chapter 137 GWPS

Prediction Limit exceedances **for VOC** include:

MW-15 - methane, 1,4-dichlorobenzene, benzene, chlorobenzene, chloroethane

**HLW Engineering Group, 204 West Broad Street, P.O. Box 314, Story City, Iowa 50248**  
**(515) 733-4144**  **(515) 733-4146 Fax**

MW-15 Characterization (Supplemental Well)

Dissolved methane is reported at 2,640 ug/L in the sample collected from MW-15. Table 12 is attached as a summary of water quality at MW-15 over time. Methane and alkalinity demonstrate decreasing trends in concentrations since installation of the vent trenches.

SSL Record and Evaluation (not evaluated for compliance, rather for water quality change)

The 95% LCL and 95% UCL are as follows:

Well	Compound	95% LCL	95% UCL	GWPS	Comment
MW-15 Supplemental	Arsenic (ug/L)	139.891	201.609	10.0	
MW-15 Supplemental	Cobalt (ug/L)	13.060	16.190	2.6 (site-specific)	
MW-15 Supplemental	Benzene (ug/L)	1.595	4.505	5.0	In compliance
MW-22 AZPOC	Arsenic (ug/L)	2.000	2.000	10.0	In compliance
MW-22 AZPOC	Cobalt (ug/L)	0.500	0.500	2.6 (site-specific)	In compliance
MW-22 AZPOC	Benzene (ug/L)	0.500	0.500	5.0	In compliance

*Note that MW-15 (Supplemental Well) is located upgradient from the groundwater seep collection system. MW-22 is the attenuation zone point of compliance (AZPOC) well located downgradient of the groundwater seep collection system to monitor the static nature of plume of impact.*

Wells returning to detection monitoring

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 2025 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**



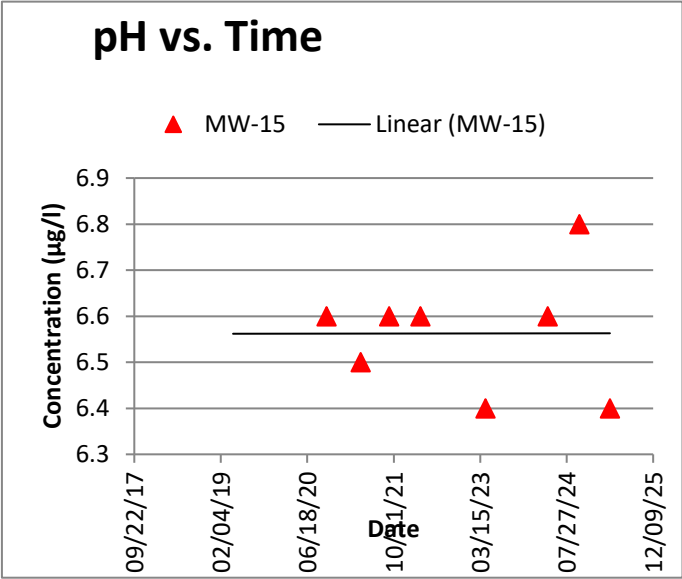
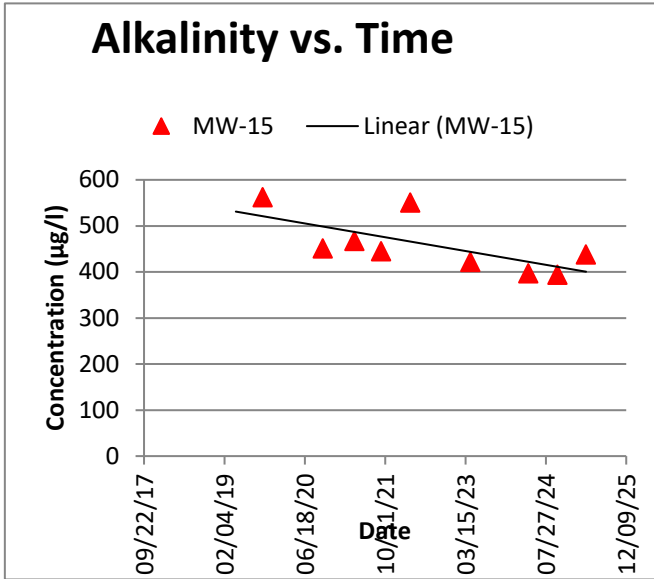
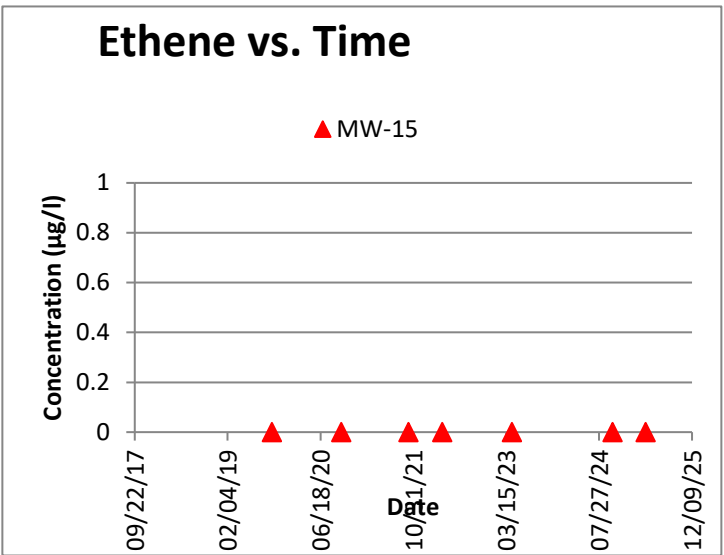
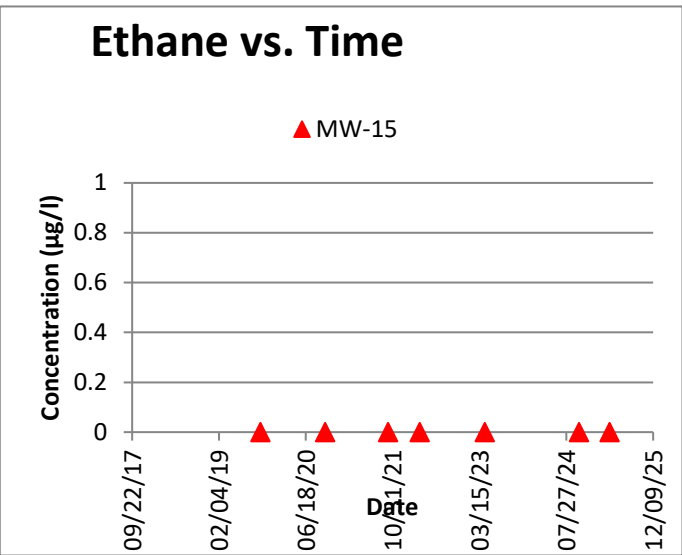
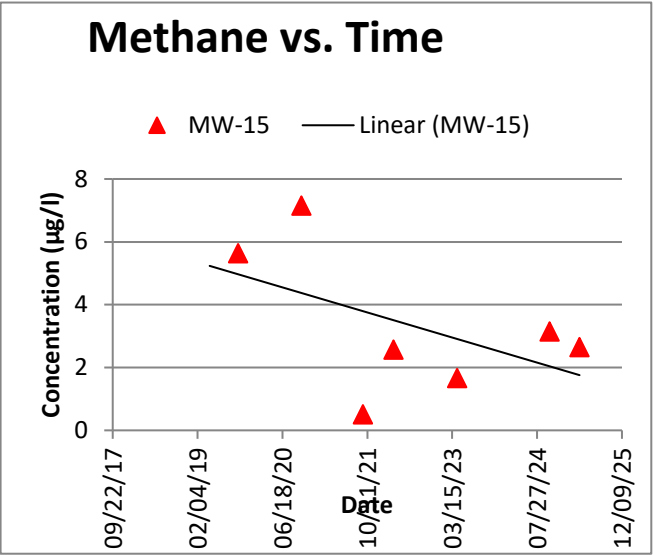
Todd Whipple, CPG  
Project Manager

cc: Karl Taylor, Director

**HLW Engineering Group, 204 West Broad Street, P.O. Box 314, Story City, Iowa 50248**  
**(515) 733-4144**      ◇◇◇      **(515) 733-4146 Fax**

Table 12  
Methane, Ethane, Ethene, Alkalinity, and pH over Time  
Annual Water Quality Report  
Jones County Sanitary Landfill  
Permit No. 53-SDP-01-76C

Sample Date	Methane	Ethane	Ethene	Alkalinity	pH
	MW-15	MW-15	MW-15	MW-15	MW-15
	mg/L	mg/L	mg/L	ug/L	ug/L
4/16/2019					
9/30/2019	5.64	<0.005	<0.005	562	
10/7/2020	7.15	<0.010	<0.010	451	6.6
4/22/2021				467	6.5
10/5/2021	0.514	<0.00828	<0.00773	445	6.6
4/4/2022	2.57	<0.00828	<0.00773	551	6.6
4/14/2023	1.67	<0.007	<0.010	422	6.4
4/8/2024				397	6.6
10/8/2024	3.15	<0.005	<0.005	394	6.8
4/3/2025	2.65	<0.005	<0.005	438	6.4



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**GROUND WATER STATISTICS**

**FOR THE**

**JONES COUNTY SANITARY LANDFILL**

**First Semi-Annual Monitoring Event in 2025**

Prepared for:  
**Jones County Solid Waste Management**  
13859 Edinburgh Road  
Anamosa, IA

Prepared by:  
Jeffrey A. Holmgren  
**Otter Creek Environmental Services, LLC**  
Elgin, IL  
(847) 464-1355

**June 2025**

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