#### TECHNICAL MEMORANDUM



**DATE:** September 9, 2025

**TO:** Emily Brickman, P.G., Senior Project Manager – Geologist, EnSafe

**FROM:** Ian Klein, Staff Engineer, Harbor

**RE:** Bi-weekly Site Inspection

NABORS Landfill Mountain Home, AR

Harbor Project No: L8247885

Harbor visited the NABORS landfill in Mountain Home, Arkansas on August 28, 2025, to conduct the bi-weekly site inspection to assess the general condition of the landfill and the leachate collection system (LCS). The LCS was last fully repaired by Advanced Fluid Technologies (AFT) in October and November of 2022; however, within a few weeks of these repairs, the LCS began malfunctioning. By March 2023, most of the LCS points were malfunctioning. A quote was then requested and received from AFT to again repair the system. No authorization for the subsequent repairs was provided prior to the expiration of Harbor's contract with DEQ in June 2023.

Landmarc Environmental (Landmarc), a company specializing in LCS installation and service, conducted a full assessment of the LCS on December 3-4, 2024. A report summarizing these activities was submitted on January 20, 2025. Harbor discontinued site visits in February 2025 until DEQ approved a new budget for activities occurring at NABORS. The budget was approved on April 3, 2025, and site visits will continue until 2026.

EnSafe submitted a Scope of Services and Fee Estimate (Revision 1) to the Arkansas Department of Energy and Environment on February 28, 2025, which included proposals from Harbor and Landmarc to complete repairs to the LCS. On July 10, 2025, the Arkansas Division of Environmental Quality Office of Land Resources provided a letter approving EnSafe's Scope of Services and Fee Estimate for LCS repairs at NABORS Landfill. Repairs to the LCS system are scheduled to begin on September 2, 2025with anticipated completion by September 4, 2025.

The LCS remains largely unchanged from previous inspections. Findings and observations from the current landfill inspection are summarized below:

- Vertical leachate collection sump (VLCS)-1 was not overflowing and observed at 3/4 capacity (see photograph 1).
- VLCS-2 appeared to be functioning correctly and was observed at 3/4 capacity.
- The leachate tank battery level was -23.7 inches. As noted in previous inspections, it appears that the leachate tank level indicator is not functioning correctly (see photograph 2).
- No stormwater was observed in the tank containment. As such, none was released while Harbor was on-site (see photograph 3).

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- The panel displays were off at all LCS stations except LCS-2, LCS-5, LCS-6, and LCS-7.
- LCS-2 level remained at 0.0 inches and did not activate when the sump was placed in "hand" or "auto" mode. LCS-2 also displayed a pump fault alarm.
- LCS-5 level remained at 9.7 inches and did not activate when the sump was placed in "hand" or "auto" mode, despite the display giving a "station ok" notice.
- LCS-6 level remained at 9.4". The sump did not activate when placed in "hand" or "auto" mode, and both green and red strobes were flashing. The station displayed a pump fault alarm.
- LCS-7 level remained at 0.0" and the station displayed a pump fault.
- The display at LCS-9 had been removed.
- An erosional washout is present along the road between LCS-4 and LCS-5.
- A damaged pressure relief vent was observed on the west side of Area 1-2, between LCS-1 and LCS-2 (see photograph 3).
- Damaged closure turf was observed on the north side of Area 1-2 at coordinates 36.46181,
   -92.45045 (see photograph 4).
- Damaged closure turf was observed on the east side of Area 1-3, above LCS-7 (see photograph 5).

Attachment A is a map showing the LCS points. Photographs are included in Attachment B. Copies of the field notes and the LCS status form are included in Attachment C.

The leachate collection system has been functioning at a minimal level, resulting in some leachate generation, mainly by placing some of the LCS points in "hand" mode. 417 Services began hauling leachate on July 2, 2024. As of February 23, 2025, 417 Services hauled 226 loads of leachate (866,700 gallons) to the City of Springfield, Missouri wastewater treatment plant under wastewater contribution permit #593.

No leachate was hauled between February 24, 2025, and April 10, 2025. 417 Services resumed hauling leachate on April 11, 2025. Since hauling resumed in April 2025, and as of August 21, 2025, 123 loads of leachate (473,550 gallons) have been hauled to the City of Springfield for disposal.

#### **Attachments:**

Attachment A – Site Map

*Attachment B – Site Photographs* 

Attachment C – Field Notes and Leachate Collection System Status Form



# **Attachment A**

**Site Map** 





# **Attachment B**

**Site Photographs** 





**Photograph 1**: View at VLCS-1 sump level.



**Photograph 2:** View of no stormwater in containment.





**Photograph 3:** View of damaged pressure relief vent on west side of Area 1-2.



**Photograph 4:** View of damaged closure turf on the north side of Area 1-2.





**Photograph 5:** View of damaged closure turf on east side of Area 1-3.



## **Attachment C**

Field Notes and Leachate Collection System Status Inspection Form



Birlala	s Landfill  redy Inspection	
1 alak	Plain, 80°F	
Ligita	Therefore, and the second seco	
12:00	Ion arrives on-site	
12:05	VCLS-2 observed	
	-> 3/4 Full	
	-No signs of leakage	
12:05	VCLS-1 observed	
	->3/4 full	
	-> Multiple signs of leakage	
12:10	-> Multiple signs of leakage  Tank bottery observed	
	> Tank level @-23.7	
	→ No stormuster in containment	
12:15	L(5-1 observed	
12:25	LCS-3 observed 2*	
12:25	Lis observed 3#	
12:25	LCS-4 observed	
12:25	LCS-5 observed	
12:30	LC5-8 observed	
12:40	LCS-7 observed	
12:40	LCS-b observed	
12:45	Ian off-site	
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### **Leachate Collection System Status**

Date: 8/28/25 Arrival Time: 12:00 Location: NABORS Landfill Leachate Tank Battery Level (inches): -23.7

Weather Conditions: Raining 75°F Service on level sensor Trequested

Panel Number	Display Functioning (Yes/No)	Leachate Level (inches)	Green Flashing? (Yes/No)	Amber Flashing? (Yes/No)	Red Flashing? (Yes/No)	Working in Hand? (Yes/No)	Working in Auto? (Yes/No)	VFD Status	Hours	Alarm	Comments	
VLCS-1	N/A	N/A	N/A	N/A	7	_	-	N/A	N/A	N/A	Sump status:	3/4 full
VLCS-2	N/A	N/A	N/A	N/A	7			N/A	N/A	N/A	Sump status:	3/4 full
LCS-1	7	_	7	7	7	_	_	_	_	_		
LCS-2	У	0.0	7	7	N	1	N		1853	PF	Pump faul	t Alasan
LCS-3	N	-	И	N	N		_		_			
LCS-4	N	-	N	N	N	_			_	_		
LCS-5	Y	9.7	N	1	N	7	N	_	0	QK		
LCS-6	У	9.4	У	7	У	14	N	_	26	PF	Pump Far	It Alarm
LCS-7	У	9.0	14	N	2	2	7		29	PF		ultAlarm
LCS-8	N	~	_	7	N	-						
LCS-9											Avoided	due to weather
General (	Comments:	No sta	ormwat	er/mini	mal in	n lead	nate ta	nle batt	ery cor	ntainm		



End of Report