TECHNICAL MEMORANDUM



DATE: August 18, 2025

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

FROM: Caleb Gourley, Senior Staff Scientist, 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 13, 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 August 25, 2025. Landmarc is set to repair the LCS at the end of August 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 $\frac{1}{2}$ capacity (see photograph 1).
- VLCS-2 appeared to be functioning correctly and was observed at ¼ capacity.
- The leachate tank battery level was -22.4 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 was 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 was 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 was 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.
- 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 10, 2025, 117 loads of leachate (450,450 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 of VLCS-1 sump level.



Photograph 2: View leachate tank level indicator.





Photograph 3: View of no stormwater in containment.



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



	elty site visit	
weather	, Bo's, Clear, slight breeze	
1045	C. Gowbe 2n-5170	
10501	Amire at ULCS-Z	
	Arrive at vice-1	
	Amire at tank battery	
	- tout (evel 0 - 24,0"	
	- no su in containment	
1059:	twice at ccs-1	
De sie	CONTRACTOR OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER	
1106:	Arrice at LCS-2	
1108:	Andre at LCS-3	
1110:	And at ccs-c	
1112:	trive at ccs-5	
1115:	Arme at CCS-8	
1116:	turne at LCS-?	
1118:	Arme at LCS-6	
1125:	C. Garly off- 5.70	





Leachate Collection System Status

Date: 8/13/25	_ Arrival Time:	1045	Location: NABORS Landfill	Leachate Tank Battery Level (inches):	-24.0
Weather Conditions:	80's, clear,	slight	breeze		

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	N	N	N	N/A	N/A	N/A	Sump status: 1/2 capacity
VLCS-2	N/A	N/A	N/A	N/A	N	4	7	N/A	N/A	N/A	Sump status: 1/4 carpacity
LCS-1	~	_	-	_	_	_	—	_	-	-	station not operational
LCS-2	Y	0.0	N	N	N	N	N		1853	Y	Pump fault
LCS-3	~	_	-	_	_	_	-	-	-		station not operational
LCS-4	N	_	_	_	_	-	-	_	-	_	() XX
LCS-5	Y	9.7	N	N	N	N	N	_	0	4	station or
LCS-6	Y	9.4	4	N	Y	~	N	_	26	4	Pump Paul+
LCS-7	Y	0.0	N	N	~	N	N	_	29	7	
LCS-8	N	_	_	_	_		_	-	-	_	Station nut apprational
LCS-9	N	_	_	_	_	_	-	_	-	_	(1)
General (Comments:										

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End of Report