TECHNICAL MEMORANDUM



DATE: September 16, 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 September 10, 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 Division of Environmental Quality (DEQ) Office of Land Resources on February 28, 2025, which included proposals from Harbor and Landmarc to complete repairs to the LCS. On July 10, 2025, the DEQ approved EnSafe's Scope of Services and Fee Estimate for LCS repairs, which were conducted on September 2-5, 2025. The LCS system was partially repaired, which included installation of 30-amp power disconnects and new PD6000 controllers.

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.
- VLCS-2 appeared to be functioning correctly and was observed at 1/4 capacity.
- The leachate tank battery level was 115.9". Landmarc installed a new level indicator sensor on the leachate tanks while on-site.
- No stormwater was observed in the tank containment. As such, none was released while Harbor was on-site (see photograph 1).

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- LCS-1 displayed a leachate level of 58.9". The station appeared to be operating in both "hand" and "auto" modes.
- LCS-2 displayed a leachate level of 48.6". The station appeared to be operating in both "hand" and "auto" modes.
- LCS-3 displayed a leachate level of 0.6". The station appeared to be operating in both "hand" and "auto" modes.
- LCS-4 displayed a leachate level of 62.2". The station appeared to be operating in both "hand" and "auto" modes.
- LCS-5 displayed a leachate level of 401.9". The VFD displayed a "Error 1" message, indicating a problem within the VFD itself. Landmarc stated that the sump pump is more than likely faulty, causing voltage issues within the VFD. The station is not functioning correctly and will need additional repairs.
- LCS-6 displayed a leachate level of 370.6". The station appeared to be functioning correctly.
- LCS-7, LCS-8, and LCS-9 remain non-operational. Landmarc will need to make a return trip to complete repairs.
- 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 2).
- Damaged closure turf was observed on the north side of Area 1-2 at coordinates 36.46181, -92.45045 (see photograph 3).
- Damaged closure turf was observed on the east side of Area 1-3, above LCS-7 (see photograph 4).

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 is mostly functioning correctly. 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 September 14, 2025, 134 loads of leachate (515,900 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 no stormwater in containment.



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





Photograph 3: View of damaged closure turf on the north side of Area 1-2.



Photograph 4: View of damaged closure turf on east side of Area 1-3.



Attachment C

Field Notes and Leachate Collection System
Status Inspection Form



Nalsons Lane		Nations Landfill Bi-weekly site visit	9/10/20
	Clear, slight breeze	weather: 80%, clear, calm	
1045: C. Gan	be on-site	1035: C. Gowly on-sit	
1050: Amire	at VLCS-Z	1039: Luville at VCCS-Z	
1053: Amre		1042: Avrite at VLCS-1	
1056: Amire	at tank battery	loyet. Awre at leachate	tank contain
- tout	(evel 0 - 24,0"	- tank level @ 115.	1 11
- no s	u in containment	- no sw in cont	ainment
1059; Arrive	at ccs-1	louls: Arrive at LCS-1	
De significant	C. Dieber de la contra de la fina de la contra del la contra de la contra de la contra del la contra de la contra de la contra del la contra de la contra de la contra del la contra de la contra del la contra de la contra del la contra de la contra de la contra del	1052: Awire at LCS.	2_
1106: Arrive	at LCS-Z	1054: Arme at LCS.	3
1108: Amre	at LCS-3	1056: Aurive at LCS-	4
1110: Ande	at ccs-4	1100: Arive at LCS.	5
1112: Arrive	at 4cs-5	1104: Awin at LCS-	ह
1115: Arme	at CCS-8	1106. Arrive at LCS-	7
1116: Surve	at LCS-7	1109: June at LCS-	6
1118: Ann	at LC5-6	1120: C. Govolay off-sit	c
1125: C. Gar	ly 098-5170		
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Leachate Collection System Status

Date: 9/10/25	Arrival Time: 10	Location:	NABORS Landfill	Leachate Tank Battery Level (inches):	115.9	
Weather Conditions:	80's, clear, calv	n				_

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 Operational? (Yes/No)	Comments	
VLCS-1	N/A	N/A	N/A	N/A	N	4	4	N/A	Sump Capacity:	1/4 capacity
VLCS-2	N/A	N/A	N/A	N/A	N	~	N	N/A	Sump Capacity:	3/4 capacity
LCS-1	4	58.9	N	N	\sim	4	Y	4	Station	OK
LCS-2	7	48.6	~	N	N	4	4	Y	ε τ	1(
LCS-3	4	0.6	N	N	N	4	/ Y	Y	ts.	ц
LCS-4	~	62,2	N	N	N	Y	~	Y	4	t _j
LCS-5	1	401.9	N	N	N	~	N	N	Evror	\
LCS-6	~	370.6	N	~	N	4	Y	Y	Station of	
LCS-7	N	_	_	_	-	_	-	-	Station off	
LCS-8	N	_	_	_	_	-	_	_	NO JF	D
LCS-9	N	_	_	_	_	_	_		NO displ	ey or UFD
General (Comments:						-			



End of Report