

**DATE:** December 9, 2024

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

**FROM:** Caleb Gourley, *Staff Scientist, Harbor*

**RE:** Bi-weekly Site Inspection  
NABORS Landfill  
Mountain Home, AR  
*Harbor Project No: ENSF-23299*

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Harbor visited the NABORS landfill in Mountain Home, Arkansas on November 20, 2024, 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.

Upon commencement of the subcontract with EnSafe, Inc. (EnSafe) in April 2024, Harbor retained Comfort Systems USA (CSUSA) to begin repairs of the LCS. CSUSA conducted partial repairs of the system; however, they were unable or unwilling to conduct all of the repairs necessary and have since been terminated as the repair contractor. Harbor contacted Landmarc Environmental (Landmarc), a company specializing in LCS installation and service, to assess the leachate collection system.

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 is not functioning correctly and was observed at capacity and beginning to overflow (see photograph 1).
  - VLCS-2 appeared to be functioning correctly and the sump was at approximately 1/2 capacity.
  - Minimal stormwater was observed in the leachate tank battery containment. As such, no stormwater was released while Harbor was on-site (see photograph 2).
  - The panel displays were off at LCS-1 through LCS-5, and LCS-8 through LCS-9. The VFDs did not activate when the sump was placed in "hand" or "auto" mode.
  - LCS-6 displayed a pump fault. The red and green strobes were both active.
  - LCS-7 displayed a pump fault; and the red strobe was active.
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- The closure turf has some significant rills present between LCS-1 and LCS-2 on the north side of Area 1-2. These rills have sediment deposited in them which is allowing vegetation to grow. An erosional washout is present along the road between LCS-4 and LCS-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. Harbor contract water hauler 417 Services LLC (417 Services) began hauling leachate on July 2, 2024. As of November 17, 2024, 417 Services hauled 135 loads of leachate totaling 516,350 gallons to the City of Springfield, Missouri wastewater treatment plant under wastewater contribution permit #593.

**Attachments:**

*Attachment A – Site Map*

*Attachment B – Site Photographs*

*Attachment C – Field Notes and Leachate Collection System Status Form*

**Attachment A**  
**Site Map**

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**Attachment B**  
**Site Photographs**

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**Photograph 1:** View of VLCS-1 at capacity and beginning to overflow.



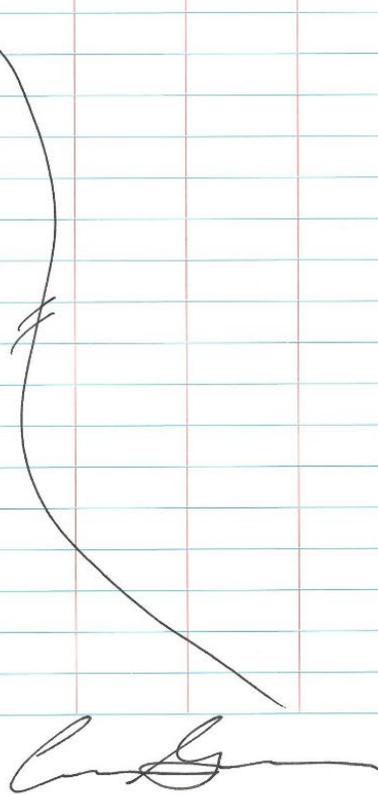
**Photograph 2:** View of minimal stormwater in leachate tank containment.

**Attachment C**

**Field Notes and Leachate Collection System  
Status Inspection Form**

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Nabors Landfill		11/21/24
Bi-weekly leachate management		
Weather: 50's, clear, breezy		
903:	C. Gortley + I. Klein on-site	
906:	Arrive at VLCS-2	
909:	Arrive at VLCS-1	
912:	Arrive at leachate tank battery	
	- tank level @ 37.6"	
	- minimal stormwater in containment	
	- none released	
915:	Arrive at LCS-1	
919:	Arrive at LCS-2	
921:	Arrive at LCS-3	
923:	Arrive at LCS-4	
925:	Arrive at LCS-5	
928:	Arrive at LCS-9	
931:	Arrive at LCS-8	
932:	Arrive at LCS-7	
935:	Arrive at LCS-6	
940:	Attempt to sample leachate tank	
	However, level not high enough to gravity feed.	
950:	Decon sampling equipment	
1020:	Collect leachate sample w/ assistance from hauler	
1045:	Attempt to sample NG-4 well.	
	Blockage in well casing approx. 20-30 ft BGS. <del>approx. 20-30 ft BGS.</del>	
1100:	Decon equipment	
1115:	Attempt to sample NAT3-2 well.	
	Blockage in well casing approx. 10-15 ft BGS.	
1130:	C. Gortley + I. Klein off-site.	





Leachate Collection System Status

Date: 11/20/24 Arrival Time: 903 Location: NABORS Landfill Leachate Tank Battery Level (inches): 37.6"

Weather Conditions: 50's, clear, windy

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/A	N/A	N/A	Sump status: <u>at capacity</u>
VLCS-2	N/A	N/A	N/A	N/A	~	Y	Y	N/A	N/A	N/A	Sump status: <u>1/2 full</u>
LCS-1	~	-	-	-	-	-	-	-	-	-	<u>station not operational</u>
LCS-2	~	-	-	-	-	-	-	-	-	-	" "
LCS-3	~	-	-	-	-	-	-	-	-	-	" "
LCS-4	~	-	-	-	-	-	-	-	-	-	" "
LCS-5	~	-	-	-	-	-	-	-	-	-	" "
LCS-6	Y	<u>9.4</u>	Y	~	Y	~	~	-	<u>26</u>	Y	<u>Pump Fault</u>
LCS-7	Y	<u>0.0</u>	~	~	Y	~	~	-	<u>29</u>	Y	" "
LCS-8	~	-	-	-	-	-	-	-	-	-	<u>station not operational</u>
LCS-9	~	-	-	-	-	-	-	-	-	-	" "

General Comments:

End of Report

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