

DATE: February 17, 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: ENSF-23299

Harbor visited the NABORS landfill in Mountain Home, Arkansas on February 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 initial repairs on December 3-4, 2024. A report summarizing these activities was submitted on January 20, 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 appeared to be functioning correctly and was observed at 3/4 capacity.
 - VLCS-2 appeared to be functioning correctly and was observed at 1/3 capacity.
 - The stormwater in the leachate tank battery containment was frozen (see photograph 1). The pH of the stormwater was not measured, and no water was released.
 - The panel displays were off at all LCS stations except LCS-2, LCS-5, and LCS-7.
 - LCS-2 level was at 31.3 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.
 - LCS-7 level remained at 0.0 inches and did not activate when the sump was placed in "hand" or "auto" mode. LCS-7 also displayed a pump fault alarm.
 - The display at LCS-9 had been removed (see photograph 2).
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- The closure turf has some significant rills present near LCS-1 and LCS-2 (see photograph 3). These rills have sediment deposited in them which allows 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 February 9, 2025, 417 Services hauled 211 loads of leachate totaling 808,950 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

Attachment B

Site Photographs



Photograph 1: Secondary containment frozen solid.



Photograph 2: View of missing display in LCS-9 panel.



Photograph 3: View of rills near LCS-1.

Attachment C

Field Notes and Leachate Collection System Status Inspection Form

ATTACHMENTS

Wednesday, February 13th, 2025
Nabors Leachate Bi-Weekly
Partly Cloudy 40-50°F

11:30 Ian Arrives On-site
11:35 VCLS-2 1/3 Full
11:35 VCLS-1 3/4 Full
11:40 Leachate Tank Battery Level
↳ 134.6
Rainwater Containment Frozen Solid
11:40 LCS-1 No Display
11:45 LCS-2 Pump Fault Alarm
11:45 LCS-3 No Display
11:45 LCS-4 No Display
11:50 LCS-5 OK
11:50 LCS-9 Display Physically Removed
11:55 LCS-8 No Display
11:55 LCS-7 Pump Fault Alarm
12:00 LCS-6 No Display
12:10 Ian Off-Site

Ian Klein



Leachate Collection System Status

Date: 2/13/25 Arrival Time: 11:30 Location: NABORS Landfill Leachate Tank Battery Level (inches): 134.6
 Weather Conditions: 40-50°F Partly Cloudy

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/A	N/A	N/A	Sump status:	3/4 Full
VLCS-2	N/A	N/A	N/A	N/A	N	—	—	N/A	N/A	N/A	Sump status:	1/3 Full
LCS-1	N	—	N	N	N	—	—	—	—	—		
LCS-2	Y	31.3	N	N	N	N	N	—	1853	PF	Pump Fault Alarm	
LCS-3	N	—	N	N	N	—	—	—	—	—		
LCS-4	N	—	N	N	N	—	—	—	—	—		
LCS-5	Y	9.7	N	N	N	N	N	—	0	OK		
LCS-6	N	—	N	N	N	—	—	—	—	—		
LCS-7	Y	0.0	N	N	N	N	N	—	29	PF	Pump Fault Alarm	
LCS-8	N	—	N	N	N	—	—	—	—	—		
LCS-9	N	—	N	N	N	—	—	—	—	—	Display physically removed	
General Comments:		Leachate Stormwater Containment was Frozen ^{solid} over, No pH taken										
The level is quite high, perhaps a discharge pipe froze?												

End of Report
