

DATE: April 24, 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 April 22, 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 new budget was approved on April 3, 2025, and site visits will continue until 2026.

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 overflowing (see photographs 1-2).
 - VLCS-2 appeared to be functioning correctly and was observed at 1/2 capacity.
 - The leachate tank battery level was at 131.9 inches.
 - There was no stormwater in the leachate tank containment.
 - The panel displays were off at all LCS stations except LCS-2, and LCS-5.
 - 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.
 - The display at LCS-9 had been removed.
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- The closure turf has some significant rills present near LCS-1 and LCS-2 (see photograph 4). 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.
- A turbine vent on top of Area 1-2 has become detached near coordinates 36.46114, -92.45014 (see photograph 5).
- Damaged closure turf was observed around a pressure relief vent on the north side of Area 1-2 (see photograph 6).

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 23, 2025, 417 Services hauled 226 loads of leachate totaling 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 that time, 417 Services has hauled 12 loads totaling 46,200 gallons of leachate to the City of Springfield.

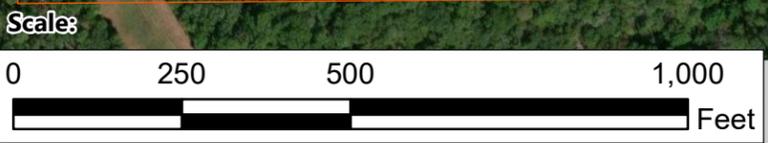
Attachments:

Attachment A – Site Map

Attachment B – Site Photographs

Attachment C – Field Notes and Leachate Collection System Status Form

Attachment A
Site Map



Legend

- Landfill Boundary
- VLCS Points
- LCS Points



Attachment B
Site Photographs



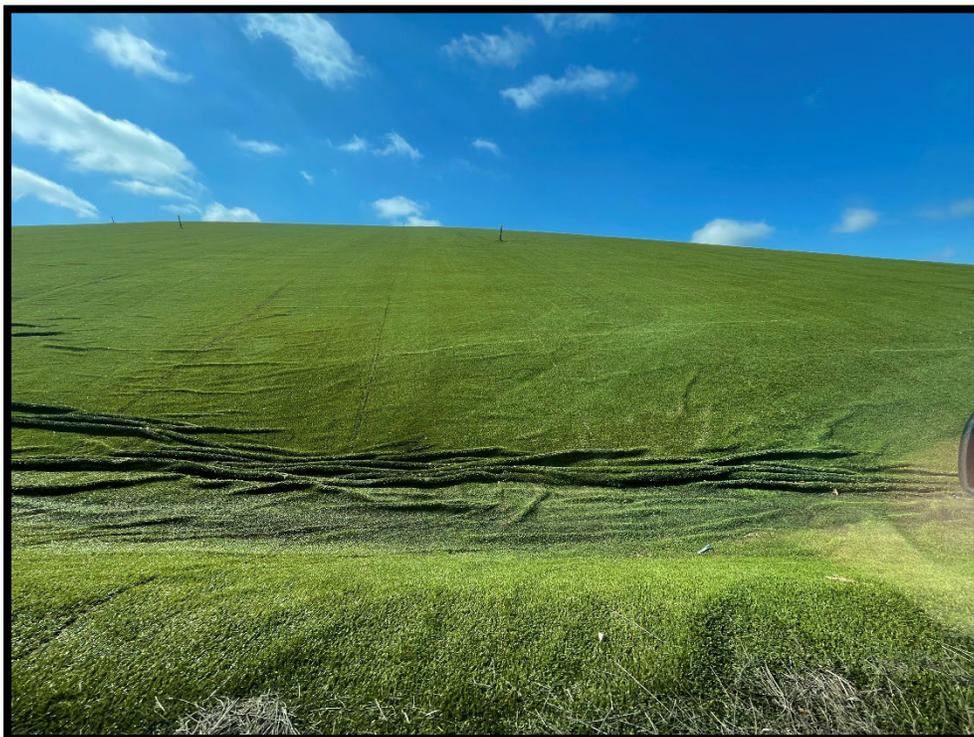
Photograph 1: View of erosional rill from VLCS-1 overflow.



Photograph 2: View of VLCS-1 sump at capacity.



Photograph 3: View of leachate tank containment.



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



Photograph 5: View of detached turbine vent on north side of Area 1-2.



Photograph 6: View of damaged turf around PRV on north side of Area 1-2.

Attachment C

Field Notes and Leachate Collection System Status Inspection Form

Tuesday, April 22nd 2025

Bi-weekly Leachate Mngmt. - Nabors Landfill
Clear, 70°F

- 11:05 Ian arrives on-site
- 11:10 VCLS-2 1/2 capacity
- 11:15 VCLS-1 overflowing
- 11:20 Leachate tank battery
 - ↳ 131.9 in
 - ↳ Stormwater containment dry
- 11:20 LCS-1 No Display
- 11:25 LCS-2 ~~XXXXXX~~ 0.0", 1853hr, PF
- 11:25 LCS-3 No Display
- 11:30 LCS-4 No Display
- 11:30 LCS-5 9.7 inches, 0 hour, Alarm OK
- 11:35 LCS-9 No Display (literally)
- 11:40 LCS-8 No Display
- 11:40 LCS-7 No Display
- 11:40 LCS-6 No Display
- 11:45 Ian off-site

Ian K



Leachate Collection System Status

Date: 4.20².25 Arrival Time: 11:05 Location: NABORS Landfill Leachate Tank Battery Level (inches): 131.9
 Weather Conditions: Sunny, 70°F

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: <i>at capacity</i>
VLCS-2	N/A	N/A	N/A	N/A	N	N	N	N/A	N/A	N/A	Sump status: <i>half-full</i>
LCS-1	N	-	-	-	-	-	-	-	-	-	
LCS-2	Y	0.0	N	N	N	N	N	-	1853	PF	<i>Pump Fault Alarm</i>
LCS-3	N	-	-	-	-	-	-	-	-	-	
LCS-4	N	-	-	-	-	-	-	-	-	-	
LCS-5	Y	9.7	N	N	N	N	N	-	0	OK	
LCS-6	N	-	-	-	-	-	-	-	-	-	
LCS-7	N	-	-	-	-	-	-	-	-	-	
LCS-8	N	-	-	-	-	-	-	-	-	-	
LCS-9	-	-	-	-	-	-	-	-	-	-	<i>Display removed</i>
General Comments:		<i>Leachate Tank stormwater containment dry</i>									

End of Report
