TECHNICAL MEMORANDUM



DATE: July 3, 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 July 2, 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.

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 near capacity but was not observed overflowing (see photograph 1).
- VLCS-2 appeared to be functioning correctly and was observed at 1/2 capacity.
- The leachate tank battery level was -29.5 inches. As noted in the June 4th inspection, it appears that the leachate tank level indicator is not functioning correctly.
- Minimal stormwater was observed in the tank containment. As such, none was released while Harbor was on-site. (see photograph 2).
- The panel displays were off at all LCS stations except LCS-2, LCS-5, 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.

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- 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 3).
- Damaged closure turf was observed on the east side of Area 1-3, above LCS-7 (see photographs 4-5).
- An outdoor literature box was affixed to the leachate tank containment that displays the wastewater contribution permit (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. 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 June 29, 2025, 78 loads of leachate (300,300 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 nearing capacity.



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





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.





Photograph 5: View of damaged closure turf on east side of Area 1-3.



Photograph 6: View of literature box containing wastewater contribution permit.



Attachment C

Field Notes and Leachate Collection System
Status Inspection Form



| Nabor. Bi-wee | | | _ | | 6/17/25 | 1 | Bi-wee | My Si | te-0131 | - | | |
|------------------|--------|---------|--------|----------|-----------|-----|---------|---------|---------|---------|----------|----|
| weather | - | | | breeze | | | weather | : 30'5, | clear, | Slight | breeze | |
| 1041: | C. Gow | hy on | n-site | | | _ | 1058: | C.Gowl | mg pn | -site | | |
| | Arrive | | | | | | 1102: | Amire | at u | LC5.2 | | |
| | Amre | | | | | | 1122: | Amile | at v | 165-1 | | |
| 9 | | | | empty, | fillos up | | 1126: | Amic | at L | eachate | Tank | C |
| 1051; | | | | | montabuen | | | - tout | level | reads. | -29.5" | |
| | | on-Si | | | | 1 - | | - minin | nal sw | none | released | |
| | | k bevel | - | | | | | - mom | + pen | nt ba | - | |
| 1058; | | | | | i | | 1135: | | | | | |
| 1102; | | | | 53,0.0 | 85 | | 1137; | Closu | s 4mg | + tear | near | 40 |
| | Amie | | | | | | 1140: | Awire | at L | -Cs-Z | | |
| | Amore | | | | | | 1143. | LCS.3 | + 60 | 5-4 n | an-alo | |
| 1108 | Awre | c LC | 5-5-:9 | 7.05 | 0 | 1 | 1145; | Amile | at L | C5-5 | | |
| | Amre | | | | | | 1147: | Arrive | at L | C5-8 | | |
| | Amre | | | 0, 20, 8 | P | | 1149: | | | | | |
| | - clos | one to | of ton | ` | 151 | 3 | 1150: | Arrive | - at | LC5-6 | | |
| | Amre | | | | | | 1157: | C. Gow | my off | -5,78 | | |
| 1127: | C.Go. | nly | 0375 | Te. | - 4 | | | | | | | |
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| | | | | | 7 | | | | | | | |





Leachate Collection System Status

| Date: | 7/2/25 | _ Arrival Time: | 1058 | Location: | NABORS Landfill | Leachate Tank Battery Level (inches): | -29.5 | |
|-------|----------------|-----------------|--------|-----------|-----------------|---------------------------------------|-------|--|
| Weath | er Conditions: | 80's, clear, | sligh+ | breez- | | | | |

| 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: near capacity |
| VLCS-2 | N/A | N/A | N/A | N/A | N | ~ | 4 | N/A | N/A | N/A | Sump status: 1/2 capacity |
| LCS-1 | \sim | _ | _ | _ | _ | _ | _ | _ | _ | - | Station not op. |
| LCS-2 | Y | 0.0 | ~ | - | _ | _ | _ | - | 1853 | 7 | Pemp fault |
| LCS-3 | ~ | _ | | ~ | | 1 | - | - | _ | _ | Startion not of. |
| LCS-4 | ~ | _ | _ | - | _ | - | - | _ | _ | - | <i>(</i> \) |
| LCS-5 | Y | 9.7 | _ | - | _ | - | - | ~ | 0 | N | station or |
| LCS-6 | ~ | - | _ | _ | _ | _ | _ | _ | _ | _ | Station von ap. |
| LCS-7 | Y | 0.0 | _ | - | ~ | - | - | 1 | 29 | 7 | Pump fault |
| LCS-8 | N | _ | _ | _ | _ | _ | _ | - | _ | _ | Station von ap. |
| LCS-9 | \sim | _ | _ | - | _ | - | _ | _ | - | _ | |
| General (| Comments: (| eachate | level | indicad | ar al | nears | to vot | r be | Finet | rong | correctly |



End of Report