

DATE: October 18, 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

Harbor visited the NABORS landfill in Mountain Home, Arkansas on October 16, 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 appeared to be functioning correctly and the sump was at approximately $\frac{3}{4}$ capacity.
 - VLCS-2 appeared to be functioning correctly and the sump was at approximately $\frac{1}{2}$ capacity.
 - Minimal stormwater was observed in the leachate tank battery secondary containment. As such, no stormwater was released (see photograph 1).
 - 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.
 - 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.
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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 October 13, 2024, 417 Services hauled 97 loads of leachate totaling 370,050 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



Scales



Legend

- Landfill Boundary
- VLCS Points
- LCS Points



Attachment B

Site Photographs



Photograph 1: View of no stormwater observed in the leachate tank containment.

Attachment C

Field Notes and Leachate Collection System Status Inspection Form

ATTACHMENTS

Nabors Landfill 10/16/24

Bi-weekly leachate management

weather: 50's, clear, breezy

1042: C. Gowley on-site

1045: Arrive at VLCS-2

1048: Arrive at VLCS-1

1051: Arrive at leachate containment

- tank level @ 117.8

- no stormwater in containment

1054: Arrive at LCS-1

- display off, station not functioning

1057: Arrive at broken turbine vent

- turbine vent repaired, LCS-1-2

1112: Arrive at LCS-2

- display off

1114: Arrive at LCS-3

- display off

1116: Arrive at LCS-4

- display off

1118: Arrive at LCS-5

- display off

1122: Arrive at LCS-9

- display off

1125: Arrive at turbine vent near

LCS-8 - repaired

1134: Arrive at LCS-8

- display off

1136: Arrive at LCS-7

1138: Arrive at LCS-6

1142: Arrive at turbine vent near

LCS-6

- vent repaired

1200: C. Gowley off-site.





Leachate Collection System Status

Date: 10/16/24 Arrival Time: 1042 Location: NABORS Landfill Leachate Tank Battery Level (inches): 117.8"
 Weather Conditions: 50's, clear, breezy

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	✓	Y	Y	N/A	N/A	N/A	Sump status:	3/4 full
VLCS-2	N/A	N/A	N/A	N/A	✓	Y	Y	N/A	N/A	N/A	Sump status:	1/2 full
LCS-1	✓	—	—	—	—	—	—	—	—	—	station not operational	
LCS-2	✓	—	—	—	—	—	—	—	—	—	" "	
LCS-3	✓	—	—	—	—	—	—	—	—	—	" "	
LCS-4	✓	—	—	—	—	—	—	—	—	—	" "	
LCS-5	✓	—	—	—	—	—	—	—	—	—	" "	
LCS-6	Y	9.4	Y	✓	Y	✓	✓	—	26	Y	Pump Fault	
LCS-7	Y	0.0	✓	✓	Y	✓	✓	—	29	Y	Pump Fault	
LCS-8	✓	—	—	—	—	—	—	—	—	—	Station not operational	
LCS-9	✓	—	—	—	—	—	—	—	—	—	" "	
General Comments:												

End of Report
