#### TECHNICAL MEMORANDUM



**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

Harbor visited the NABORS landfill in Mountain Home, Arkansas on December 4, 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. Mr. Matt Baker with Landmarc began initial repairs on December 3, 2024, and was on-site during Harbor's visit. A DEQ Solid Waste inspector, Mr. Darrell Norton, was present on-site as well.

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 ½ capacity.
- No stormwater was observed in the leachate tank battery containment. As such, no stormwater was released while Harbor was on-site (see photograph 2).
- Landmarc was actively repairing LCS-2 during the site visit.
- The panel displays were off at LCS-1 through LCS-5, and LCS-7 through LCS-9. The VFDs did not activate when the sump was placed in "hand" or "auto" mode.
- LCS-7 displayed a pump fault.

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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 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 November 30, 2024, 417 Services hauled 148 loads of leachate totaling 566,400 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**: View of VLCS-1 at capacity and beginning to overflow.



**Photograph 2**: View of no stormwater in leachate tank containment.



### **Attachment C**

Field Notes and Leachate Collection System
Status Inspection Form



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### **Leachate Collection System Status**

Date:	12/4/24	_ Arrival Time:	0951	Location: NABORS Landfill	Leachate Tank Battery Level (inches):	17.4
Weath	er Conditions:	50's, Partl	7 clou	dy, slight breeze		

	Functioning (Yes/No)	Leachate Level (inches)	Green Flashing? (Yes/No)	Amber 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	$\sim$	$\sim$	~	N/A	N/A	N/A	Sump status: at capacity
VLCS-2	N/A	N/A	N/A	N/A	$\sim$	4	7	N/A	N/A	N/A	Sump status: 1/2 211
LCS-1	~	_	1	_	-		_	_	_	_	Station not operational
LCS-2	$\sim$	-	_	_	_	_	_	_	_	_	active repairs
LCS-3	$\sim$	_		_		_	-		_	_	Station not operational
LCS-4	N	_	_	_	—	_		_	_	_	11
LCS-5	N	_	_	-	_	_	_	_		_	1
LCS-6	$\sim$	-		_	_	_		_	-		11
LCS-7	4	0.0	N	N	N	N	N	_	29	7	Pump fault
LCS-8	$\sim$	_	_	_	_	_		_	_	-	Station not operation
LCS-9	$\sim$	_	_	_	_	~	_	_	_		is a

General Comments:



End of Report