

DIVISION OF ENVIRONMENTAL QUALITY

Sarah Huckabee Sanders **GOVERNOR** Shane E. Khoury SECRETARY

January 28, 2025

Elizabeth Mack, Senior Environmental Compliance Specialist Department of Environmental Services 755 N. Franklin, Springfield MO 65802

Re: Change of Signatory Authority

Nabors Landfill, 1320 Landfill Road, Mountain Home, AR 72653

Wastewater Contribution Permit No. 593; AFIN: 03-00051

Dear Ms. Mack:

The Arkansas Department of Energy and Environment, Division of Environmental Quality (DEQ), respectfully requests to transfer the signatory authority in accordance with Wastewater Contribution Permit No. 593. The authority changes are noted below. Please amend your records accordingly.

The following signatory authority shall be removed:

Mr. Jarrod Zweifel, P.G., former associate director Office of Land Resources

The following signatory authority shall be added:

Associate Director of the Office of Land Resources currently filled by Mr. Bryan Leamons, P.E.

The following authorized representative shall be added:

Mr. Nicholas Jones, senior operations manager, Office of Land Resources

The following authorized representative shall be added:

Mr. Charles Hurt, P.E., engineering operations manager,

Office of Land Resources

If you have any questions, please contact Clay McDaniel of my staff at 501-682-00836 or clay.mcdaniel@arkansas.gov.

Sincerely,

Bailey Taylor

Chief Administrator of Environment and DEQ Director

Arkansas Department of Energy & Environment

Nabors Landfill Discharge Monitoring Report Certification Statement

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

All samples and measurements taken are to the best of my knowledge representative of the permitted wastewater discharge.

All sampling, measurements, and analyses were conducted in accordance with guidelines prescribed in 40 CFR 136 and the Wastewater Contribution permit obtained from the City of Springfield, Missouri."

BM R		
for Bryan Learners	•	
Bryan Leamons		
Signature (Legible)		9.
Associate Director, Arkansas Energy and Environment	nt – Office of	Land Resources
Title	it Office of	<u> Luna Resources</u>
NABORS Landfill		
Name of Facility		
	*	
1/28/2025		
Date		



A Fierracon Company

January 7, 2025

Sent via Certified Mail and Email to emack@springfieldmo.gov
Certified Mail No. 9489 0090 6186 0395 64

Ms. Elizabeth Mack Pretreatment Inspector City of Springfield Department of Environmental Services 755 N. Franklin Avenue Springfield, MO 65802

Re:

Semi-Annual Leachate Report

Second Half 2024 NABORS Landfill

Mountain Home, Arkansas

Wastewater Contribution Permit No. 593

Dear Ms. Mack:

On behalf of the Arkansas Department of Energy and Environment's Division of Environmental Quality (DEQ), please find attached the results of leachate analysis for the Second Half 2024 reporting period for the referenced facility. A total of 678,050 gallons of leachate was generated during the six-month period.

The leachate generated at the North Arkansas Board of Regional Sanitation (NABORS) Landfill is transported to the City of Springfield, MO wastewater collection system under Wastewater Contribution Permit #593. A sample of the leachate plus a duplicate sample were collected on November 20, 2024, and submitted for laboratory analysis (report attached). None of the detected concentrations exceeded the permit requirements. Table 1 below summarizes the analytical methods and results of the analyses. The metals results were converted from micrograms per liter (µg/L) to milligrams per liter (mg/L) for comparison to the permit requirements.

Table 1 - Summary of Leachate Analytical Results - November 2024

Parameter	Analytical Method	Units	Permit Requirement	Leachate	Leachate Duplicate		
Arsenic	EPA 200.8 Rev 5.4 (1994)	mg/L	0.51	0.0368	0.0367		
Cadmium	EPA 200.8 Rev 5.4 (1994)	mg/L	0.13	< 0.00026	< 0.00026		
Chromium	EPA 200.8 Rev 5.4 (1994)	mg/L	2.91	0.00898	0.00899		
Copper	EPA 200.8 Rev 5.4 (1994)	mg/L	2.44	0.00132	0.00146		
Lead	EPA 200.8 Rev 5.4 (1994)	mg/L	0.53	< 0.000416	< 0.000416		

Table 1 - Summary of Leachate Analytical Results - November 2024 (Continued)

Parameter	Analytical Method	Units	Permit Requirement	Leachate	Leachate Duplicate		
Mercury	SW7470A/EPA245.1,3.0 (1994)	mg/L	0.02	< 0.016	< 0.016		
Nickel	EPA 200.8 Rev 5.4 (1994)	mg/L	5.79	0.127	0.125		
Phosphorus	EPA 200.8 Rev 5.4 (1994)	mg/L	Monitoring Requirement Only	< 0.936	< 0. 936		
Zinc	EPA 200.8 Rev 5.4 (1994)	mg/L	6.54	< 0.0208	< 0.0208		
Ammonia as N	SM 4500-NH3 B,D,C-2011	mg/L	Monitoring Requirement Only	308	300		
Cyanide (total)	SM 4500-CN B,E-2011	mg/L	0.33	< 0.010	< 0.010		
Flashpoint			<140°F	Did Not Flash	Did Not Flash		
Oil and Grease	EPA 1664 Mod, Rev. B 2010	mg/L	100	< 5.15	< 5.32		
pH SM 4500-H+ B-2011		S.U.	5.0 (minimum) 12.5 (maximum)	. 7.11	7.08		

Notes: S.U. – standard units; °C – degrees Celsius; mg/L – milligrams per liter; metals results converted from micrograms per liter to milligrams per liter for comparison to permit requirements.

Also attached is the signed Certification Statement. Let me know if you have any questions or need additional information. Please contact either of the undersigned at 501-663-8800 or via email.

Sincerely,

Thomas A. Huetter, P.G. Senior Project Manager

thuetter@harborenv.com

Leslie Davis Principal

Idavis@harborenvcom

cc:

Bryan Leamons, P.E.

Division of Environmental Quality

5301 Northshore Drive

North Little Rock, AR 72118-5317

Attachments: Laboratory Analytical Report

Certification Statement



8100 National Dr. - Little Rock, AR 72209 501-455-3233 Fax 501-455-6118

27 November 2024

Tom Huetter Harbor Environmental & Safety 5800 Evergreen Dr. Little Rock, AR 72205

Project: NABORS Landfill Leachate Sample(s)

Project Number: November 2024

SDG Number: 2411483

Enclosed are the results of analyses for samples received by the laboratory on 21-Nov-24 07:35. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

Custody Seals	~
Containers Correct	
COC/Labels Agree	
Received On Ice	
Temperature on Receipt	2.0°C

Sincerely,

Norma James Technical Director

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Tom Huetter Harbor Environmental & Safety

5800 Evergreen Dr. Little Rock, AR 72205

Project: NABORS Landfill Leachate Sample(s)

Project Number: November 2024 Date Received: 21-Nov-24 07:35



Sample Delivery Group - 2411483

One OR more of the qualifiers described below may appear in this report. Qualifiers in RED apply to this SDG (Sample Delivery Group).

pH QUALIFIERS:

Qualifier

Description

E2

Result qualified as it was received and analyzed outside of holding time. Analysis is considered a "Field" analysis.

FLASHPOINT QUALIFIER:

Qualifier

Description

DNF

Sample DID NOT FLASH at or below method required temperature of 100 degrees C or 212 degrees F.

Tom Huetter Harbor Environmental & Safety 5800 Evergreen Dr. Little Rock, AR 72205

Project: NABORS Landfill Leachate Sample(s)

Project Number: November 2024 Date Received: 21-Nov-24 07:35



Lab Number: Sample Name: Date/Time Collected:

Sample Matrix:

2411483-01 Leachate 11/20/24 10:20 Leachate

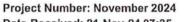
Total Metals	<u>Units</u>	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method	
Arsenic	ug/L	36.8		11/26/24 16:04	B411557	EPA 200.8, Rev. 5.4(1994)	
Cadmium	ug/L	< 0.260		11/26/24 16:04	B411557	EPA 200.8, Rev. 5.4(1994)	
Chromium	ug/L	8.98		11/26/24 16:04	B411557	EPA 200.8, Rev. 5.4(1994)	
Copper	ug/L	1.32		11/26/24 16:04	B411557	EPA 200.8, Rev. 5.4(1994)	
Lead	ug/L	< 0.416		11/26/24 16:04	B411557	EPA 200.8, Rev. 5.4(1994)	
Mercury	ug/L	< 16.0		11/26/24 15:35	B411560	SW7470A/EPA245.1,3.0-1994	
Nickel	ug/L	127		11/26/24 16:04	B411557	EPA 200.8, Rev. 5.4(1994)	
Phosphorus	mg/L	< 0.936		11/25/24 12:49	B411524	EPA 200.7, Rev 4.4 (1994)	
Zinc	ug/L	< 20.8		11/26/24 16:04	B411557	EPA 200.8, Rev. 5.4(1994)	
Wet Chemistry	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method	
Ammonia as N	mg/L	308		11/22/24 8:29	B411475	SM 4500-NH3 B,D,C-2021/EPA	
Cyanide (total)	mg/L	< 0.010		11/25/24 11:29	B411528	SM 4500-CN B,C,E 2016	
Flashpoint	°C	Did Not Flash	DNF*	11/27/24 11:35	B411591	SW 1020C, 2018	
Oil and Grease	mg/L	< 5.15		11/25/24 10:30	B411521	EPA1664 Mod, Rev. B 2010	
pH	S.U.	7.11	E2	11/21/24 13:35	B411442	SM 4500-H+ B-2011	
Temp of pH	°C ·	23.7		11/21/24 13:35	B411442	SM 2550 B-2010	

Tom Huetter **Harbor Environmental & Safety** 5800 Evergreen Dr.

Little Rock, AR 72205

Project: NABORS Landfill Leachate Sample(s)

Date Received: 21-Nov-24 07:35



ANALYTICAL RESULTS

Lab Number:	2411483-02						
Sample Name:	Leachate Duplicate						
Date/Time Collected:	11/20/24 10:20						
Sample Matrix:	Leachate						

						196
Total Metals	<u>Units</u>	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Arsenic	ug/L	36.7		11/26/24 16:10	B411557	EPA 200.8, Rev. 5.4(1994)
Cadmium	ug/L	< 0.260		11/26/24 16:10	B411557	EPA 200.8, Rev. 5.4(1994)
Chromium	ug/L	8.99		11/26/24 16:10	B411557	EPA 200.8, Rev. 5.4(1994)
Copper	ug/L	1.46		11/26/24 16:10	B411557	EPA 200.8, Rev. 5.4(1994)
Lead	ug/L	< 0.416	~	11/26/24 16:10	B411557	EPA 200.8, Rev. 5.4(1994)
Mercury	ug/L	< 16.0		11/26/24 15:38	B411560	SW7470A/EPA245.1,3.0- 1994
Nickel	ug/L	125		11/26/24 16:10	B411557	EPA 200.8, Rev. 5.4(1994)
Phosphorus	mg/L	< 0.936		11/25/24 12:50	B411524	EPA 200.7, Rev 4.4 (1994)
Zinc	ug/L	< 20.8		11/26/24 16:10	B411557	EPA 200.8, Rev. 5.4(1994)
Wet Chemistry	<u>Units</u>	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Ammonia as N	mg/L	300		11/22/24 8:29	B411475	SM 4500-NH3 B,D,C-2021/EPA
Cyanide (total)	mg/L	< 0.010		11/25/24 11:29	B411528	SM 4500-CN B,C,E 2016
Flashpoint	°C	Did Not Flash	DNF*	11/27/24 11:35	B411591	SW 1020C, 2018
Oil and Grease	mg/L	< 5.32		11/25/24 10:30	B411521	EPA1664 Mod, Rev. B 2010
pН	S.U.	7.08	E2 .	11/21/24 13:35	B411442	SM 4500-H+ B-2011
Temp of pH	°C	22.6	let	11/21/24 13:35	B411442	SM 2550 B-2010

Tom Huetter
Harbor Environmental & Safety
5800 Evergreen Dr

5800 Evergreen Dr. Little Rock, AR 72205

Project: NABORS Landfill Leachate Sample(s)

Project Number: November 2024 Date Received: 21-Nov-24 07:35





	Prepared: 21-	Wet Chemistry Bat Nov-24 13:30 By: CGF -	- Analyzed: 21-Nov-24 13:30	By: CGF		
Analyte pH	BLK NA	LCS / LCSD 99.9% / 99.4%	MS/MSD NA / NA	Dup	<u>RPD</u> 0.430%	Qualifier
	Prepared: 2	Wet Chemistry Bat 2-Nov-24 08:29 By: KJ -	ch: B411475 (Water) - Analyzed: 22-Nov-24 08:29	By: KJ		
Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.500 mg/L	98.1% / NA	103% / 107%		2.67%	
	y 1 y	*				
	Prepared: 25-N	Wet Chemistry Bat lov-24 10:30 By: KAW	ch: B411521 (Water) - Analyzed: 25-Nov-24 10:30	By: KAW	•	
Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Oil and Grease	<5.00 mg/L	79.8% / 85.1%	87.6% / NA		6.52%	
	,					
		Total Metals Batcl	h: B411524 (Water)	-		
	Prepared: 25	5-Nov-24 09:32 By: JY	Analyzed: 25-Nov-24 12:46	By: ST		
Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Phosphorus	<0.094 mg/L	101% / NA	114% / 108%		3.92%	
		V. 8 *				
	D	Wet Chemistry Bate		D K.I.		
V 4999			Analyzed: 25-Nov-24 11:29		DDD	Qualifiers
Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
0 11 // 1 //	.0 040 //	4000/ / 00 00/	07.00/ / 1/4		0.000/	
Cyanide (total)	<0.010 mg/L	100% / 98.0%	97.0% / NA		2.02%	
Cyanide (total)	<0.010 mg/L	100% / 98.0%	97.0% / NA		2.02%	
Cyanide (total)	<0.010 mg/L	100% / 98.0% Total Metals Batcl	¥		2.02%	
Cyanide (total)		Total Metals Batcl	¥	By: ST	2.02%	
Cyanide (total) Analyte		Total Metals Batcl	n: B411557 (Water)	By: ST	2.02% RPD	Qualifiers
<u>Analyte</u>	Prepared: 26 BLK <0.260 ug/L	Total Metals Batch -Nov-24 09:44 By: ST LCS / LCSD 102% / NA	n: B411557 (Water) Analyzed: 26-Nov-24 15:32 MS / MSD 104% / 105%		5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Qualifiers
<u>Analyte</u> Arsenic	Prepared: 26 BLK <0.260 ug/L <0.260 ug/L	Total Metals Batcl -Nov-24 09:44 By: ST <u>LCS / LCSD</u> 102% / NA 103% / NA	n: B411557 (Water) Analyzed: 26-Nov-24 15:32 MS / MSD 104% / 105% 96.6% / 96.6%		RPD 0.329% 0.0926%	Qualifiers
* *	Prepared: 26 BLK <0.260 ug/L <0.260 ug/L <0.260 ug/L	Total Metals Batcl -Nov-24 09:44 By: ST LCS / LCSD 102% / NA 103% / NA 100% / NA	n: B411557 (Water) Analyzed: 26-Nov-24 15:32 MS / MSD 104% / 105% 96.6% / 96.6% 95.1% / 97.6%		RPD 0.329% 0.0926% 2.55%	Qualifiers
Analyte Arsenic Cadmium Chromium Copper	Prepared: 26 BLK <0.260 ug/L <0.260 ug/L <0.260 ug/L <0.260 ug/L <0.520 ug/L	Total Metals Batcl -Nov-24 09:44 By: ST LCS / LCSD 102% / NA 103% / NA 100% / NA 103% / NA	n: B411557 (Water) Analyzed: 26-Nov-24 15:32 MS / MSD 104% / 105% 96.6% / 96.6% 95.1% / 97.6% 97.7% / 98.9%		RPD 0.329% 0.0926% 2.55% 1.24%	Qualifiers
Analyte Arsenic Cadmium Chromium Copper Lead	Prepared: 26 BLK <0.260 ug/L <0.260 ug/L <0.260 ug/L <0.260 ug/L <0.520 ug/L <0.416 ug/L	Total Metals Batcl -Nov-24 09:44 By: ST LCS / LCSD 102% / NA 103% / NA 100% / NA 103% / NA 101% / NA	n: B411557 (Water) Analyzed: 26-Nov-24 15:32 MS / MSD 104% / 105% 96.6% / 96.6% 95.1% / 97.6% 97.7% / 98.9% 94.1% / 96.2%		RPD 0.329% 0.0926% 2.55% 1.24% 2.20%	Qualifiers
Analyte Arsenic Cadmium Chromium Copper	Prepared: 26 BLK <0.260 ug/L <0.260 ug/L <0.260 ug/L <0.260 ug/L <0.520 ug/L	Total Metals Batcl -Nov-24 09:44 By: ST LCS / LCSD 102% / NA 103% / NA 100% / NA 103% / NA	n: B411557 (Water) Analyzed: 26-Nov-24 15:32 MS / MSD 104% / 105% 96.6% / 96.6% 95.1% / 97.6% 97.7% / 98.9%		RPD 0.329% 0.0926% 2.55% 1.24%	Qualifiers

Tom Huetter Harbor Environmental & Safety 5800 Evergreen Dr.

Little Rock, AR 72205

Project: NABORS Landfill Leachate Sample(s)

Project Number: November 2024



Date Received: 21-Nov-24 07:35 **QUALITY CONTROL RESULTS** Total Metals -- Batch: B411560 (Water) Prepared: 26-Nov-24 10:48 By: KW -- Analyzed: 27-Nov-24 11:39 By: ST RPD BLK Dup Qualifiers MS / MSD **Analyte** <0.200 ug/L 7.48% Mercury 96.3% / 100% 92.8% Wet Chemistry -- Batch: B411591 (Water) Prepared: 27-Nov-24 08:51 By: CNW -- Analyzed: 27-Nov-24 11:35 By: CNW BLK Dup RPD Qualifiers **Analyte** LCS / LCSD NA Ignitable / Ignitable 0.00% Flashpoint NA NA Pass1

QUALIFIER(S	Q	U	A	L	IF	IE	R	S
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DNF: Sample DID NOT FLASH at or below method required temperature of 100 degrees C or 212 degrees F.

*E2: Estimated Result; Analyzed Outside of Holding Time

Quality Control Meets Lab Acceptability Requirements *Pass1:

All Analysis performed according to EPA approved methodology when available:

SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods.

Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

Reviewed by:

Norma James **Technical Director**



8100 National Drive Little Rock, AR 72209 PHONE: 501-455-3233 FAX: 501-455-6118

CHAIN OF CUSTODY RECORD

CLIENT INFORM	MATION	• •					Project Description	Turnaround Time					Preservatio	n Code	s:		
Harbor Environr	mental & Safet	у		NABORS Landfill					1. Cool,	. Cool, 6 Degrees Centigrade 4. Thiosulfate for Decklorination				orination			
5800 Evergreen	Dr.			Leachate Sample					2. Sulfu	2. Sulfuric Acid (H ₂ SO ₄), pH < 2 5. Hydrochloric Acid(HCl)				CI)			
Little Rock, AR	72205	* *					Reporting Information	3 Day (25%)	3. Nitrio	c Acid (I	INO ₃), p	H < 2		6. Sodiu	ım Hydro	oxide (N	aOH), pH > 12
		9					Telephone: 501-663-8800	5 Day (Routine)	5		TES	T P	ARAMET	ERS			Bottle Type Code
Attn: Tom Huet	ter					Е	mail: thuetter@harborenv.com	Preservative Code:	1	1,2	1,6	1,2	1,3				G = Glass; P = Plastic
								Bottle Type:	Р	Р	Р	GA	Р				V = Septum; A = Amber
Sampler(s) Sign	ature	,	Sampler(s) Printed						int, pH	B	+	Srease), Hg s, Cd, Cr, Cu, n)		8		Arkansas Analytical Work Order Number:
Field Number	SAMPLE Date/s	COLLECTION Time/s	Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESC	CRIPTION	Flashpoint, pH	Ammonia	Cyanide	Oil and Grease	P (200.7), Hg 200.8-(As, Cd, (Pb, Ni, Zn)		9		2411483
Leachate	11/20/2	1020	X		5	Liquid	Leachate		Х	Х	Х	Х	X				01
Leach. Dup.	11/20/24	lozo	х		5	Liquid	Leachate Duplicate		Х	Х	Х	Х	Х				02
Relinquished by	v: (Signature)	Date/Time		2. Re	ceived	by: (Si	qnature) SAMPLE C	CONDITION UPON	RECEIP	T IN LAR	3		REMARK	KS / SA	MPLE	COMIN	1ENTS
3. Relinquished by	v: (Signature)	1 1 2 0 7 3 5 Date/Time	1	4. Re	celved	by lab:	6. TEMPERATUR	CORRECT: AGREE: N ICE: RE ON RECEIPT: RE GUN ID:	Ye Ye Ye → Ye HHT#	5 5	No No						
	*						FOR	COMPLETION BY	LAB ON	ILY							



ENVIRONMENTAL QUALITY

5301 NORTHSHORE DRIVE NORTH LITTLE ROCK, AR 72118-5317



9489 0090 0027 6186 0395 64

Ms. Elizabeth Mack Pretreatment Inspector City of Springfield Department of Environmental Services 755 N. Franklin Avenue Springfield, MO 65802