



April 26, 2023

Town of Cheektowaga
Engineering Department
275 Alexander Avenue
Cheektowaga, NY 14211

Attn: Mr. Patrick T. Bowen, P.E.
Town Engineer

**Re: Effluent Sample Report – March 2023
Pfohl Brothers Landfill, Town of Cheektowaga, New York**

Dear Mr. Bowen:

URS Corporation is pleased to present results of the March 2023 effluent sampling event at the Pfohl Brothers Landfill. All activities were conducted in accordance with the Town's permit with the Buffalo Sewer Authority (No. 22-07-CH016) dated effective July 1, 2022 through June 30, 2025.

Analytical results of the metals, total suspended solids, and pH for this event were compared to the discharge limitations in the Town's permit. The laboratory results showed no exceedances of the daily discharge limitations stated in the permit.

Attached please find the analytical data summary table, field notes taken during the sampling event, a sample location figure, and the laboratory report.

Please do not hesitate to call me should you have any questions regarding this submittal.

Sincerely,

URS Corporation

A handwritten signature in black ink that reads "Robert J. Murphy".

Robert J. Murphy, P.G.
Project Manager

Attachments

cc File 11172700.00002 (C-1)

MARCH 2023

EFFLUENT MONITORING REPORT

FOR

PFOHL BROTHERS LANDFILL

PREPARED BY

URS CORPORATION
1 JOHN JAMES AUDUBON PARKWAY, SUITE 210
AMHERST, NEW YORK 14228

PREPARED FOR

TOWN OF CHEEKTOWAGA
ENGINEERING DEPARTMENT
275 ALEXANDER AVENUE
CHEEKTOWAGA, NEW YORK 14211

APRIL 2023

**EFFLUENT MONITORING REPORT
MARCH 2023**

This effluent monitoring report presents analytical results from the March 2023 sampling event. There were no violations, exemptions or modifications to report. The report contains the following:

- Summary of analytical detections
- Sample technicians' field notes
- Sample location figure
- Laboratory report

"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 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 possibility of fine and imprisonment for knowing violations."

A BSA-approved signatory must sign this statement. An approved signatory is a corporate executive of the company or an individual designated responsible in writing by a corporate executive to the BSA.

ATTACHMENT 1

SUMMARY OF ANALYTICAL DETECTIONS

TABLE 1

**PFOHL BROTHERS LANDFILL - EFFLUENT MONITORING
ANALYTICAL RESULTS, TOTAL FLOW, AND MASS LOADINGS
MARCH 2023**

Sample ID	EFF-032323			
Matrix	Effluent Water			
Date Sampled	3/23/2023			
Parameter	Result	Mass Loading	Discharge Limitation	Violations
	(mg/L)	(lbs/day)	(lbs/day)	(Yes/No)
Total Barium	0.19	0.01	23.4	No
Total Cadmuim	< ⁽¹⁾ 0.0005	< 0.00003	0.23	No
Total Chromium	< 0.0010	< 0.00006	1.17	No
Total Copper	< 0.0016	< 0.0001	3.74	No
Total Lead	< 0.0030	< 0.0002	1.17	No
Total Nickel	< 0.0013	< 0.0001	3.27	No
Total Zinc	0.0066 J	0.0004	5.84	No
Total Suspended Solids	< 4.0	NA ⁽²⁾	250 ⁽³⁾	No
pH ⁽⁴⁾	7.71	NA	5.0 - 12.0	No
Total Flow ⁽⁵⁾	7,725		187,898	No

Notes:

- (1) < = Compound not detected, method detection limit shown
- (2) NA = Not Applicable
- (3) Discharge Limitation in units of mg/L
- (4) pH measurement and Discharge Limitation in Standard Units
- (5) Total Flow reported in gallons, sample was collected over a 24 hour period
- J Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

$$\text{Calculation: } \left(\frac{x \text{ mg}}{\text{L}} \right) \left(\frac{y \text{ gal}}{\text{day}} \right) \left(\frac{1 \text{ lb}}{453,600 \text{ mg}} \right) \left(\frac{3.785 \text{ L}}{\text{gal}} \right) = \frac{x \times y}{119,841} \frac{\text{lb}}{\text{day}}$$

mg = milligrams
gal = gallons
L = Liters
lb(s) = pound(s)

ATTACHMENT 2

SAMPLE TECHNICIANS' FIELD NOTES

SAMPLING FIELD SHEET



Client Name: Pfohl Brothers Landfill

Address: Aero Drive, Cheektowaga, NY

Contact: Patrick T. Bowen, P.E. Phone: 716-897-7288

Installation:

Sample Point: SP-001

Sample Location: Meter Chamber - ball valve on 6" HDPE forcemain

Date: 3/22/23 Crew: R. Murphy, T. Urban

Weather: 56 °F, cloudy

Sampling Device: NA

Time of Installation: 14:00 Type of Sample: Composite

Sample Interval: NA Sample Volume: NA

Comments and Observations: No wells running at the time of sample set-up.
PLC display volumes: WW-01 (202,577 gals), WW-02 (40 gals), WW-03 (-516,221 gals),
WW-04 (2,512,900 gals), WW-05 (599,155 gals), WW-06 (4,294,126 gals) & MH-25 (7,617,237 gals).

Date: 3/23/23 Crew: R. Murphy, T. Urban

Weather: 52 °F, rain

Time of Collection: 14:00

Field Measurements:

14:00/RJM pH Calibration: Buffer 7- 7 Buffer 4- 4 Buffer 10- 10
(time/initial)

pH Measurement: 7.71 Oakton pH Tester30, s/n 2246401

Temperature: 7.1 °C

Identification: EFF-032323 for TSS and Metals

Physical Observations: Light orange/red tint

Laboratory: Eurofins Buffalo, Amherst, NY

Comments: No wells running at the time of sample collection.
PLC display volumes: WW-01 (202,577 gals), WW-02 (40 gals), WW-03 (-521,887 gals),
WW-04 (2,512,900 gals), WW-05 (599,155 gals), WW-06 (4,301,851 gals) & MH-25 (7,624,962 gals).

Reviewed By: *Robert J. Murphy* Date: 3/23/23
(Supervisor)

ATTACHMENT 3
SAMPLE LOCATION FIGURE



URS

PFOHL BROTHERS LANDFILL
EFFLUENT SAMPLE POINT

FIGURE 1

ATTACHMENT 4

LABORATORY REPORT

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Rob Murphy
AECOM
One John James Audubon Parkway
Suite 210
Amherst, New York 14228

Generated 4/3/2023 11:58:44 AM

JOB DESCRIPTION

Pfohl Brothers Landfill

JOB NUMBER

480-207204-1

Eurofins Buffalo

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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4/3/2023 11:58:44 AM

Authorized for release by
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(716)504-9838



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Definitions/Glossary

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-207204-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-207204-1

Job ID: 480-207204-1

Laboratory: Eurofins Buffalo

Narrative

**Job Narrative
480-207204-1**

Comments

No additional comments.

Receipt

The sample was received on 3/24/2023 3:55 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 7.7° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-207204-1

Client Sample ID: EFF-032323

Lab Sample ID: 480-207204-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.19		0.0020	0.00070	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0066	J	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

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Client Sample Results

Client: AECOM
 Project/Site: Pfohl Brothers Landfill

Job ID: 480-207204-1

Client Sample ID: EFF-032323

Lab Sample ID: 480-207204-1

Date Collected: 03/23/23 14:00

Matrix: Water

Date Received: 03/24/23 15:55

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.19		0.0020	0.00070	mg/L		03/27/23 08:32	03/27/23 15:41	1
Cadmium	ND		0.0020	0.00050	mg/L		03/27/23 08:32	03/27/23 15:41	1
Chromium	ND		0.0040	0.0010	mg/L		03/27/23 08:32	03/27/23 15:41	1
Copper	ND		0.010	0.0016	mg/L		03/27/23 08:32	03/27/23 15:41	1
Lead	ND		0.010	0.0030	mg/L		03/27/23 08:32	03/27/23 15:41	1
Nickel	ND		0.010	0.0013	mg/L		03/27/23 08:32	03/27/23 15:41	1
Zinc	0.0066	J	0.010	0.0015	mg/L		03/27/23 08:32	03/27/23 15:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			03/29/23 15:35	1

QC Sample Results

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-207204-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-662779/1-A
Matrix: Water
Analysis Batch: 662949

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 662779

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	ND		0.0020	0.00070	mg/L		03/27/23 08:32	03/27/23 14:09	1
Cadmium	ND		0.0020	0.00050	mg/L		03/27/23 08:32	03/27/23 14:09	1
Chromium	ND		0.0040	0.0010	mg/L		03/27/23 08:32	03/27/23 14:09	1
Copper	ND		0.010	0.0016	mg/L		03/27/23 08:32	03/27/23 14:09	1
Lead	ND		0.010	0.0030	mg/L		03/27/23 08:32	03/27/23 14:09	1
Nickel	ND		0.010	0.0013	mg/L		03/27/23 08:32	03/27/23 14:09	1
Zinc	ND		0.010	0.0015	mg/L		03/27/23 08:32	03/27/23 14:09	1

Lab Sample ID: LCS 480-662779/2-A
Matrix: Water
Analysis Batch: 662949

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 662779

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.200	0.199		mg/L		100	85 - 115
Chromium	0.200	0.204		mg/L		102	85 - 115
Copper	0.200	0.197		mg/L		99	85 - 115
Lead	0.200	0.198		mg/L		99	85 - 115
Nickel	0.200	0.198		mg/L		99	85 - 115
Zinc	0.200	0.197		mg/L		99	85 - 115

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-663244/1
Matrix: Water
Analysis Batch: 663244

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Suspended Solids	ND		1.0	1.0	mg/L			03/29/23 15:35	1

Lab Sample ID: LCS 480-663244/2
Matrix: Water
Analysis Batch: 663244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

QC Association Summary

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-207204-1

Metals

Prep Batch: 662779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207204-1	EFF-032323	Total/NA	Water	200.7	
MB 480-662779/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-662779/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 662949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-662779/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	662779
LCS 480-662779/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	662779

Analysis Batch: 663047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207204-1	EFF-032323	Total/NA	Water	200.7 Rev 4.4	662779

General Chemistry

Analysis Batch: 663244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207204-1	EFF-032323	Total/NA	Water	SM 2540D	
MB 480-663244/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-663244/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-207204-1

Client Sample ID: EFF-032323

Lab Sample ID: 480-207204-1

Date Collected: 03/23/23 14:00

Matrix: Water

Date Received: 03/24/23 15:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			662779	NVK	EET BUF	03/27/23 08:32
Total/NA	Analysis	200.7 Rev 4.4		1	663047	LMH	EET BUF	03/27/23 15:41
Total/NA	Analysis	SM 2540D		1	663244	SAK	EET BUF	03/29/23 15:35

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600



Accreditation/Certification Summary

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-207204-1

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

- 1
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Method Summary

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-207204-1

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF

Protocol References:

- EPA = US Environmental Protection Agency
- SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

- EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600



Sample Summary

Client: AECOM
Project/Site: Pfohl Brothers Landfill

Job ID: 480-207204-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-207204-1	EFF-032323	Water	03/23/23 14:00	03/24/23 15:55

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Chain of Custody Record

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Client Information		Sampler: <u>R. MURPHY</u>		Lab PM: <u>Schove, John R</u>		Carrier Tracking No(s): <u>480-183629-29655.1</u>	
Client Contact: <u>Ms. Ann Marie Kropovitch</u>		Phone: <u>716-903-1346</u>		E-Mail: <u>John.Schove@et.eurolins.com</u>		State of Origin:	
Company: <u>AECOM</u>		PWSID:		Analysis Requested		Page: <u>Page 1 of 1</u>	
Address: <u>One John James Audubon Parkway Suite 210</u>		Due Date Requested:		Total Number of Containers		Job #: <u>480-183629-29655.1</u>	
City: <u>Amherst</u>		TAT Requested (days): <u>STANDARD</u>		Field Filtered Sample (Yes or No)		Preservation Codes:	
State, Zip: <u>NY, 14228</u>		Compliance Project: <u>Δ Yes Δ No</u>		Performs MS/MSD (Yes or No)		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Nitric Acid R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)	
Phone: <u>144060</u>		WO #: <u>60411174.11175616.00000</u>		200.7 - Metals - Ba, Cd, Cr, Cu, Pb, Ni, Zn		Other:	
Email: <u>ann.marie.kropovitch@aecom.com</u>		Project #: <u>48002609</u>		2540D - TSS		Special Instructions/Note:	
Project Name: <u>Pfohl Brothers Landfill</u>		SSOW#: <u></u>		D		N	
Site: <u></u>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
<u>EFF-032323</u>		<u>3/23/23</u>		<u>1400</u>		<u>Comp</u>	
Matrix (Water, Sewage, Swastich, Other)		Preservation Code:		Water			
Possible Hazard Identification		Flammable <input type="checkbox"/>		Skin Irritant <input type="checkbox"/>		Poison B <input type="checkbox"/>	
Non-Hazard <input checked="" type="checkbox"/>		Deliverable Requested: I, II, III, IV, Other (specify)		Unknown <input type="checkbox"/>		Radiological <input type="checkbox"/>	
Empty Kit Relinquished by:		Date:		Time:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Relinquished by: <u>[Signature]</u>		Date/Time: <u>3/23/23 1:55</u>		Company: <u>AECOM</u>		Return To Client <input type="checkbox"/> Archive For <input type="checkbox"/> Months	
Relinquished by:		Date/Time:		Company:		Special Instructions/QC Requirements:	
Relinquished by:		Date/Time:		Company:		Method of Shipment: <u>DROP OFF</u>	
Custody Seals Intact: <u>Δ Yes Δ No</u>		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <u>717 # 1 FILE</u>		Received by: <u>[Signature]</u> Date/Time: <u>3/23/23 1:55</u> Company: <u>TAN</u>	



Login Sample Receipt Checklist

Client: AECOM

Job Number: 480-207204-1

Login Number: 207204

List Number: 1

Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AECOM
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	