



## Annual Composting Facility Report

July 1<sup>st</sup>, 2023 (Year) – June 30<sup>th</sup>, 2024 (Year)  
Due July 31<sup>st</sup>

County: BLACK HAWK Permit #: 07-COM-02-22  
Responsible Official: DOYLE SMITH  
Facility Name: CITY OF CEDAR FALLS  
Address: 2200 TECHNOLOGY PARKWAY  
City, State, Zip: CEDAR FALLS, IA 50613  
Please make address corrections as necessary

Send completed form to:  
**Becky.Jolly@dnr.iowa.gov**, or:  
Land Quality Bureau  
c/o Theresa Stiner  
502 E 9<sup>th</sup> St  
Des Moines IA 50319-0034

### REGISTERED FACILITIES ONLY: check the box that describes your facility

- ☒ Yard waste only (vegetative matter such as grass clippings, leaves, garden waste, brush, and trees)
- ☐ Food residuals singly or in combination with yard waste and/or agricultural waste (includes but is not limited to manure, crop residuals, bedding, and other vegetative by-products produced during farm processing. Dead animals are not included). Food waste and yard waste received from off premises is two tons or less per week. (If food waste and yard waste received from off premises is greater than two tons per week complete the Permitted Facilities section.)
- ☐ Dead farm animals and bulking agent only. Compost facility owner is owner of at least some of the sites where animals are generated. (If Compost facility owner does not own any of the sites where animals are generated or other materials are also composted complete the Permitted Facilities section.)

### PERMITTED FACILITIES ONLY: check types of materials accepted and provide tonnage

- |                                                       |                |
|-------------------------------------------------------|----------------|
| <input type="checkbox"/> Yard Waste                   | tonnage: _____ |
| <input type="checkbox"/> Wood (other than yard waste) | tonnage: _____ |
| <input type="checkbox"/> Agricultural waste           | tonnage: _____ |
| <input type="checkbox"/> Animal mortalities           | tonnage: _____ |
| <input type="checkbox"/> Sewage Sludge                | tonnage: _____ |
| <input type="checkbox"/> Industrial sludge            | tonnage: _____ |
| <input type="checkbox"/> Food residuals               | tonnage: _____ |
| <input type="checkbox"/> Paper                        | tonnage: _____ |
| <input type="checkbox"/> Other (specify): _____       | tonnage: _____ |

Total tonnage of material composted tonnage: 7,175

Total capacity of the facility (maximum tons that can be composted per year): tonnage: 7,400

### FINISHED COMPOST MARKETED OR USED. Provide information about the amount of finished compost REMOVED from the Facility for the following uses. If you answer "yes" to any question, please provide tonnage information for this reporting period.

Amount of finished composted REMOVED from the Facility: 6,900 Tons/year

Is the finished Compost: (check all that apply)

☐ Sold \_\_\_\_\_ tons/year ☒ Given away 4,800 tons/year

4 Used by your organization 2,100 tons/year

Is your product registered with the Iowa Department of Agriculture & Land Stewardship? ☐ Yes ☒ No

#### Questions? Call or email:

Theresa Stiner, Project Officer, [theresa.stiner@dnr.iowa.gov](mailto:theresa.stiner@dnr.iowa.gov), 515-721-7979  
02/2023 cmc

**COMPOST FACILITY OPERATION INFORMATION.** In this section provide information as to how the composting facility operates.

What method/s of composting is employed at the facility

☒ Turned piles/windrows

☐ Aerated static piles/windrows

☐ Vermicompost

☐ In-vessel

☐ Other (please describe) \_\_\_\_\_

☐ Facility is enclosed

Has the facility operator taken and passed an approved composting course?

☒ Yes, has taken and passed a composting operator training course

☐ No, has **not** taken a composting operator training course

**PERMITTED COMPOSTING FACILITIES ONLY.** Each composting facility is required by IAC Chapter 105.9(4) to test its compost to make sure that the concentrations of all metals and fecal coliform or Salmonella sp. do not exceed regulated levels. Please attach a copy of the test results to this form, making sure that the applicable units (reference 105) are clearly recorded. All composting facilities are required to take biweekly temperature readings of compost piles, and weekly readings of moisture levels. Facilities are not required to report these readings on this annual form, but should keep this information on file to be referenced if necessary.

How often is the finished compost product analyzed?

☐ Never

☐ Monthly

☐ Twice a year

☒ Annually

☐ Other (please describe) \_\_\_\_\_

**CERTIFICATION**

I certify under penalty of law that I am the owner, operator, or authorized representative of the owner or operator and that I have examined and am familiar with the information reported above, and that I believe the information is true, accurate and complete.

Signature: \_\_\_\_\_

Date: 15 July 2024

Name & agency of Person Certifying: Doyle Smith City of Cedar Falls

Email: Doyle.Smith@cedarfalls.com

Phone Number: 319-273-8629

Additional Comments:

Questions? Call or email:

Theresa Stiner, Project Officer, [theresa.stiner@dnr.iowa.gov](mailto:theresa.stiner@dnr.iowa.gov), 515-721-7979  
02/2023 cmc

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Patty Tometich  
Cedar Falls Water Reclamation  
501 E. 4th  
Cedar Falls, Iowa 50613  
Generated 7/17/2024 5:03:28 PM

## JOB DESCRIPTION

annual compost grab testing

## JOB NUMBER

310-285357-1

# Eurofins Cedar Falls

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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 North Central, LLC Project Manager.

## Authorization



Generated  
7/17/2024 5:03:28 PM

Authorized for release by  
Conner Calhoun, Project Management Assistant I  
[Conner.Calhoun@et.eurofinsus.com](mailto:Conner.Calhoun@et.eurofinsus.com)  
(319)277-2401

## Case Narrative

Client: Cedar Falls Water Reclamation  
Project: annual compost grab testing

Job ID: 310-285357-1

**Job ID: 310-285357-1**

**Eurofins Cedar Falls**

### **Job Narrative 310-285357-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### **Receipt**

The sample was received on 7/10/2024 8:45 AM. 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 time was 1.1°C.

#### **Metals**

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

#### **General Chemistry**

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

#### **Biology**

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

Eurofins Cedar Falls

Sample Summary

Client: Cedar Falls Water Reclamation  
Project/Site: annual compost grab testing

Job ID: 310-285357-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-285357-1	City of Cedar Falls Compost Site	Solid	07/10/24 08:22	07/10/24 08:45

- 1
- 2
- 3
- 4
- 5
- 6
- 7

# Client Sample Results

Client: Cedar Falls Water Reclamation  
Project/Site: annual compost grab testing

Job ID: 310-285357-1

Client Sample ID: City of Cedar Falls Compost Site

Lab Sample ID: 310-285357-1

Date Collected: 07/10/24 08:22

Matrix: Solid

Date Received: 07/10/24 08:45

## Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Arsenic	5.16		1.85	0.779	mg/Kg	✱	07/17/24 14:11	5	NFT2
Cadmium	<0.352		0.927	0.352	mg/Kg	✱	07/17/24 14:11	5	NFT2
Copper	28.7		2.78	1.13	mg/Kg	✱	07/17/24 14:11	5	NFT2
Lead	23.2		4.64	1.45	mg/Kg	✱	07/17/24 14:11	5	NFT2
Nickel	8.02		2.78	1.26	mg/Kg	✱	07/17/24 14:11	5	NFT2
Selenium	<1.39		2.78	1.39	mg/Kg	✱	07/17/24 14:11	5	NFT2
Zinc	77.0		9.27	4.45	mg/Kg	✱	07/17/24 14:11	5	NFT2

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	0.0377		0.0375	0.0154	mg/Kg	✱	07/17/24 14:53	1	A6US

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
Percent Moisture (Moisture)	51.4		0.1	0.1	%		07/11/24 14:26	1	T5AC
Percent Solids (Moisture)	48.6		0.1	0.1	%		07/11/24 14:26	1	T5AC

## Method: SM 9222D - Coliforms, Fecal (Membrane Filter)

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
Coliform, Fecal	<210		210	210	cfu/g	✱	07/10/24 11:25	10	ENB7

# Accreditation/Certification and Definitions Summary

Client: Cedar Falls Water Reclamation  
Project/Site: annual compost grab testing

Job ID: 310-285357-1

## Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

## 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
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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
SQL	Method Quantitation Limit
MRL	Method Reporting 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
SDL	Sample Detection Limit
SDL	Sample Detection Limit
SDL	Sample Detection Limit
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



## Method Summary

Client: Cedar Falls Water Reclamation  
Project/Site: annual compost grab testing

Job ID: 310-285357-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
Moisture	Percent Moisture	EPA	EET CF
SM 9222D	Coliforms, Fecal (Membrane Filter)	SM	EET CF
3050B	Preparation, Metals	SW846	EET CF
7471B	Preparation, Mercury	SW846	EET CF

### Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Environment Testing  
America



310-285357 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: <u>City of Cedar Falls - Water Reclamation</u>			
City/State:	CITY <u>Cedar Falls</u>	STATE <u>IA</u>	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE <u>7/10/24</u>	TIME <u>845</u>	Received By: <u>IL</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input checked="" type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: <u>C/ies</u>
Multiple Coolers?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____
Cooler Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
<b>Temperature Record</b>			
Coolant: <input type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input checked="" type="checkbox"/> Other: <u>Packs</u> <input type="checkbox"/> NONE			
Thermometer ID: <u>4</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>1.1</u>		Corrected Temp (°C):	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
<b>Additional Comments</b>			



Cedar Falls Division  
3019 Venture Way  
Cedar Falls, IA 50613

Phone 319 - 277 - 2401 or 1 - 800 - 750 - 2401  
Fax 319 - 277 - 2425

Company: City of Cedar Falls Water Reclamation  
Send Report To: Tyler Griffin, Patty Tometch, Quinn Aalfs  
Address: 501 East Fourth Street  
City/State/Zip Code: Cedar Falls IA 50613-3320  
Telephone Number: 319-273-8633 (general) Fax: N/A  
Sampled by: (Print Name) Doyle Smith (site) / Patty Tometch (split lab)  
(Signature) *[Signature]*  
Your PO #: verbal  
Invoice To: City of Cedar Falls Water Reclamation  
Project Name: annual compost grab testing  
Project Number: N/A  
Report Email: Tyler.Griffin@cedarfalls.com  
Address: Quinn.Aalfs@cedarfalls.com  
CC: Patty.Tometch@cedarfalls.com

Sample ID	Sampled (pull) Date	Time Sampled	Number of containers shipped	Grab	Composite	Field Filtered	ice	HNO <sub>3</sub> (Red & White Label)	HCl (Blue & White Label)	NaOH (Teal & White Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow & White Label)	H <sub>2</sub> SO <sub>4</sub> Glass (Yellow & White Label)	None (Black & White Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other Specify: Process Water	9222D Fecal Coliform Most Probable Number (SEE NOTE)	6020 Metals (ICPMS) - analyze for As, Cd, Cu, Pb, Hg, Ni, Se and Zn	Analyze For	Matrix
City of Cedar Falls compost site	7/10/24	0822	1	X									X					X						
<b>NOTE --- please do multiple dilutions for Coliform MPN, &lt;1,000 expected</b>																								

Sample Specific Notes: sample is solids (compost)			
RL of <1,000 MPN required as per Iowa 567-- Chapter 105.9 (455B,455D)			
NOTE: All turn around times are calculated from the time of receipt at Eurofins TestAmerica			
NOTICE: Pre-Arrangements must be made AT LEAST 48 Hours in ADVANCE to receive results with RUSH turn around time commitments; additional charges may be assessed.			
NOTE: There may be a charge assessed for Eurofins TestAmerica disposing of sample remainders			
Relinquished by: <i>[Signature]</i>	Date: 7/10/24	Time: 8 45	Received by:
Shipped Via: N/A - walk-in			
Received for EF TestAmerica by: <i>[Signature]</i>	Date: 7/10/24	Time: 6:45	Comments: Temperature Upon Receipt (Obs'd °C): Therm ID No.:
Laboratory Comments:			



## DEPARTMENT OF PUBLIC WORKS

City of Cedar Falls  
2200 Technology Parkway  
Cedar Falls, Iowa 50613  
[www.cedarfalls.com](http://www.cedarfalls.com)

Administration Division ♦ Planning & Community Services Division  
Phone: 319-273-8606 Fax: 319-273-8610

Water Reclamation Division  
Phone: 319-273-8633 Fax: 319-273-8610

To: Doyle Smith

From: Patty Tometich, Wastewater Treatment Lab Tech

cc: Tyler Griffin, Quinn Aalfs

Date: July 18, 2024

### RE: Lab Test Report – 2024 Compost Sample Test Results

The annual compost sample was submitted to the lab on 7/10/2024 at 0822. Samples were also submitted to Eurofins TestAmerica laboratory fecal coliforms, metals and solids analysis.

As per State of Iowa Administrative Code 5670, Environmental Protection Commission, Chapter 105 Organic Materials Composting Facilities, 105.3 (10), publication date 01/21/2015, the compost sample shall meet the criteria listed below.

- Inert materials, "...the concentration of human-made inert materials such as glass, metal and plastic is less than 1.5 percent by dry weight. Compost shall not be applied to land, sold or given away unless the size of any human-made inert materials is less than 13 mm (0.512 inches)."
- "Fecal coliforms shall be less than 1000 most probable number (MPN) per gram of total solids (dry weigh basis)."
- "The concentrations of human-made inert materials comply with 105.3 (10) and the concentrations of all metals are less than the following:

metal	concentration mg/kg dry weight
Arsenic (As)	41
Cadmium (Cd)	39
Copper (Cu)	1500
Lead (Pb)	300
Mercury (Hg)	17
Nickel (Ni)	420
Selenium (Se)	36
Zinc (Zn)	2800"

## 7-10-24 Final Compost Sample Test Results

- Inert materials: No glass, metal or plastic materials were found in the sample. There were multiple small twig pieces, pictured below with a ruler for scale reference.



Thus, the compost sample met quantity and size limits for human-made inert material [“...less than 1.5 percent by dry weight”; “...size less than 13 mm (0.512 inches)”]

- Fecal coliforms were tested at Eurofins TestAmerica laboratory. The result for fecal coliforms was <210 CFU most probable number (MPN) per gram dry weight basis. This result passes the code requirement that, “fecal coliforms shall be less than 1000 most probable number (MPN) per gram of total solids (dry weigh basis)....”
- Metals concentrations results from Eurofins TestAmerica laboratory are summarized below. All results were below the maximum limit as listed in the code.

<u>name of metal</u>	<u>MAXIMUM concentration</u> <u>mg/kg dry weight</u>	<u>ACTUAL concentration</u> <u>mg/kg dry weight</u>
Arsenic (As)	41	5.16
Cadmium (Cd)	39	<0.352
Copper (Cu)	1500	28.7
Lead (Pb)	300	23.2
Mercury (Hg)	17	0.0377
Nickel (Ni)	420	8.02
Selenium (Se)	36	<1.39
Zinc (Zn)	2800	77.0

- The solids results, tested in the City of Cedar Falls lab, are in the table below.

	% Total Solids	<b>AVERAGE</b> % <b>Total Solids</b>	% Fixed Solids	<b>AVERAGE</b> % <b>Fixed Solids</b>	% Volatile Solids	<b>AVERAGE</b> % <b>Volatile Solids</b>
Sample ID						
compost	49.90	-----	63.81	-----	36.19	-----
compost duplicate	49.32	<b>49.61*</b>	63.36	<b>65.59</b>	36.64	<b>36.41</b>

\* Note: Total solids result from Eurofins TestAmerica laboratory report was 48.6%

On the next page is a table with the past solids test data. Please do advise me of any questions you may have about this report.

### **Compost Samples - Historical Solids Test Result Summary**

<b>AVERAGE % Total Solids</b>				
<b>Year</b>	<b>City WRF Lab Result</b>	<b>Eurofins Test America Lab Result</b>	<b>AVERAGE % Fixed Solids</b>	<b>AVERAGE % Volatile Solids</b>
<b>2017</b>	57.47	-----	78.36	21.64
<b>2018</b>	56.41	54.8	77.29	22.71
<b>2019</b>	56.95	58.0	71.96	28.04
<b>2020</b>	55.76	65.8	58.71	41.30
<b>2021</b>	53.36	55.4	51.38	48.62
<b>2022</b>	61.16	61.3	62.56	37.44
<b>2023</b>	46.42	45.9	57.65	42.36
<b>2024</b>	49.61	48.6	63.59	36.41