
February 3, 2025

Ms. Diane Czarnecki
Industrial Hygienist
Facilities Management Division
GSA Public Buildings Service – Heartland Region
2300 Main Street
Kansas City, Missouri 64108

**RE: Goodfellow Federal Center - Metals in Air Investigation - Building 110
4300 Goodfellow Boulevard
St. Louis, Missouri 63120
OCCU-TEC Project No. 925001**

Dear Ms. Czarnecki:

Thank you for the opportunity to assist the General Services Administration (GSA) with the Resource Conservation and Recovery Act (RCRA) metals in air sampling investigation of the above referenced buildings located at the Goodfellow Federal Complex, in St. Louis, Missouri. OCCU-TEC understands that the purpose of the investigation was to provide sampling data regarding existing conditions to supplement previous investigation reports prepared for the facility. The following report summarizes the sample collection activities, and the laboratory analytical results for the samples submitted.

On January 8, 2025, a Missouri licensed air sampling professional from OCCU-TEC conducted air sampling for the presence of seven of the RCRA metals including Silver, Arsenic, Barium, Cadmium, Chromium, Lead, and Selenium. Sampling was conducted within the occupied areas of Building 110.

The proposed sampling scheme, the numbers of samples, sample distribution and general methodology was developed based on previous investigation methodology and coordination with the GSA. Sample locations and samples collected from discretionary locations were determined by OCCU-TEC field personnel while on-site.

Resource Conservation and Recovery Act Metals Air Sampling

Air sampling for RCRA metals was collected on 37-millimeter (mm) cassettes with 0.8 micrometer (μm) mixed cellulose ester (MCE) filters using powered air sampling pumps in accordance with National Institute for Occupational Safety and Health (NIOSH) sampling methods. Samples were collected in a method sufficient to collect a minimum sample volume of 500 liters. Air samples were submitted under chain-of-custody to Environmental Hazards Services, LLC (EHS) in Richmond, Virginia for independent analysis of RCRA metals according to NIOSH Method 7300. EHS is accredited by the American Industrial Hygiene Association (AIHA) utilizing the Industrial Hygiene Proficiency Analytical Testing (IHPAT) program. EHS's IHPAT Laboratory ID is LAP-100420.

Results of the air sampling are summarized in the table below by identifying the range of results for building 110 for each of the seven metals that were sampled. **Samples with a “<” sign indicate that the results were below the laboratory's method reporting limit.**

Analysis	Lowest Concentration ($\mu\text{g}/\text{m}^3$)	Highest Concentration ($\mu\text{g}/\text{m}^3$)
Arsenic	<0.26	<0.26
Barium	<0.26	<0.26
Cadmium	<0.051	<0.051
Chromium	<1.3	<1.3
Lead	<0.26	<0.26
Selenium	<1.3	<1.3
Silver	<0.26	<0.26

Results of the air samples collected indicate that all of the air samples collected from Building 110 contained concentrations of RCRA metals below the laboratory's method reporting limit or the OSHA Permissible Exposure Limit (PEL). Sample locations and the corresponding result are summarized in the enclosed in

the laboratory analytical results are included in the attached tables. The air sampling professional's Missouri Lead license is included in Appendix A.

It should be noted that this air sampling investigation was only a screening of airborne RCRA metals and should not be interpreted or used to determine compliance or non-compliance with OSHA personnel monitoring regulations. GSA may choose to compare results with guidance limits from additional organizations for risk evaluation, including but not limited to the American Conference of Governmental Industrial Hygienists (ACGIH) and/or the World Health Organization (WHO).

OCCU-TEC appreciates the opportunity to work with GSA on this project. If you have any questions concerning this report, or if we may be of any additional service, please feel free to contact us.

Sincerely,

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Jeff T. Smith
Senior Project Manager

Kevin Heriford
Director of EH&S Depts. (QA/QC)

Appendices:

A: Air Sample Results Summary Table

B: Laboratory Analytical Results and Chain of Custody Documentation

C: Qualifications and Licenses

APPENDIX A
AIR SAMPLE RESULTS SUMMARY TABLE

Appendix A

Sample Summary Table

Building 110 Air Sample Results Summary Table				
Sample ID	Location	Analyte	Concentration (ug/m ³)	Recommended Limits ¹ (ug/m ³)
110-A-01	Shop - east side	Arsenic	<0.26	10
		Barium	<0.26	500
		Cadmium	<0.051	5
		Chromium	<1.3	500
		Lead ²	<0.26	1
		Selenium	<1.3	200
		Silver	<0.26	10
110-A-02	Shop - south side	Arsenic	<0.26	10
		Barium	<0.26	500
		Cadmium	<0.051	5
		Chromium	<1.3	500
		Lead ²	<0.26	1
		Selenium	<1.3	200
		Silver	<0.26	10
110-A-03	Shop - west side	Arsenic	<0.26	10
		Barium	<0.26	500
		Cadmium	<0.051	5
		Chromium	<1.3	500
		Lead ²	<0.26	1
		Selenium	<1.3	200
		Silver	<0.26	10
110-A-04	Pegasus Office - west side	Arsenic	<0.26	10
		Barium	<0.26	500
		Cadmium	<0.051	5
		Chromium	<1.3	500
		Lead ²	<0.26	1
		Selenium	<1.3	200
		Silver	<0.26	10
110-A-05	Pegasus Office - east side	Arsenic	<0.26	10
		Barium	<0.26	500
		Cadmium	<0.051	5
		Chromium	<1.3	500
		Lead ²	<0.26	1
		Selenium	<1.3	200
		Silver	<0.26	10
110-A-06	Field Blank	Arsenic	<0.15 ug	10
		Barium	<0.03 ug	500
		Cadmium	<0.75 ug	5
		Chromium	<0.15 ug	500
		Lead ²	<0.75 ug	1
		Selenium	<0.75 ug	200
		Silver	<0.15 ug	10

Appendix A
Sample Summary Table

Notes:

¹Limits equal to the OSHA Permissible Exposure Limits (PELs)

² Limits equal to the World Health Organization (WHO) Ambient Air Limit

APPENDIX B
LABORATORY ANALYTICAL RESULTS AND CHAIN OF CUSTODY
DOCUMENTATION



7469 Whitepine Rd
North Chesterfield, VA 23237
Telephone: 800.347.4010

Air Metals Analysis Report

Client: OCCU-Tec Inc Report Number: 25-01-02700
2604 NE Industrial Drive
Suite 230 Received Date: 01/16/2025
North Kansas City, MO 64117 Reported Date: 01/24/2025

Project/Test Address: GSA Goodfellow Complex

Client Number:
202507

Laboratory Results

Fax Number:

Lab Sample Number	Client Sample Number	Analyzed Date	Analyte	Air Volume (L)	Total Metal (ug)	Concentration (ug/m ³)	Narrative ID
25-01-02700-001	202507	01/23/2025	Arsenic (As)	599.4	<0.15	<0.26	
			Barium (Ba)		<0.15	<0.26	
			Cadmium (Cd)		<0.030	<0.051	
			Chromium (Cr)		<0.75	<1.3	
			Lead (Pb)		<0.15	<0.26	
			Selenium (Se)		<0.75	<1.3	
			Silver (Ag)		<0.15	<0.26	
25-01-02700-002	202507	01/23/2025	Arsenic (As)	599	<0.15	<0.26	
			Barium (Ba)		<0.15	<0.26	
			Cadmium (Cd)		<0.030	<0.051	
			Chromium (Cr)		<0.75	<1.3	
			Lead (Pb)		<0.15	<0.26	
			Selenium (Se)		<0.75	<1.3	
			Silver (Ag)		<0.15	<0.26	
25-01-02700-003	202507	01/23/2025	Arsenic (As)	598.8	<0.15	<0.26	
			Barium (Ba)		<0.15	<0.26	
			Cadmium (Cd)		<0.030	<0.051	

Environmental Hazards Services, L.L.C

Client Number: 202507

Report Number: 25-01-02700

Project/Test Address: GSA Goodfellow Complex

Lab Sample Number	Client Sample Number	Analyzed Date	Analyte	Air Volume (L)	Total Metal (ug)	Concentration (ug/m ³)	Narrative ID
25-01-02700-004	01/23/2025		Chromium (Cr)		<0.75	<1.3	
			Lead (Pb)		<0.15	<0.26	
			Selenium (Se)		<0.75	<1.3	
			Silver (Ag)		<0.15	<0.26	
			Arsenic (As)	594.2	<0.15	<0.26	
			Barium (Ba)		<0.15	<0.26	
			Cadmium (Cd)		<0.030	<0.051	
			Chromium (Cr)		<0.75	<1.3	
			Lead (Pb)		<0.15	<0.26	
			Selenium (Se)		<0.75	<1.3	
25-01-02700-005	01/23/2025		Silver (Ag)		<0.15	<0.26	
			Arsenic (As)	591.4	<0.15	<0.26	
			Barium (Ba)		<0.15	<0.26	
			Cadmium (Cd)		<0.030	<0.051	
			Chromium (Cr)		<0.75	<1.3	
			Lead (Pb)		<0.15	<0.26	
			Selenium (Se)		<0.75	<1.3	
			Silver (Ag)		<0.15	<0.26	
			Arsenic (As)	0	<0.15	---	
			Barium (Ba)		<0.15	---	
25-01-02700-006	01/23/2025		Cadmium (Cd)		<0.030	---	
			Chromium (Cr)		<0.75	---	
			Lead (Pb)		<0.15	---	
			Selenium (Se)		<0.75	---	
			Silver (Ag)		<0.15	---	
			Arsenic (As)		<0.15	---	
			Barium (Ba)		<0.15	---	
			Cadmium (Cd)		<0.030	---	
			Chromium (Cr)		<0.75	---	
			Lead (Pb)		<0.15	---	

Environmental Hazards Services, L.L.C

Client Number: 202507

Report Number: 25-01-02700

Project/Test Address: GSA Goodfellow Complex

Lab Sample Number	Client Sample Number	Analyzed Date	Analyte	Air Volume (L)	Total Metal (ug)	Concentration (ug/m ³)	Narrative ID
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Sample Narratives:

Method: NIOSH 7300M

Analyst: Carlos Gonzalez

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Reviewed By Authorized Signatory:

Tasha Eaddy
QA/QC Clerk

Sample Results denoted with a "less than" (<) sign contains less than the reporting limit for each particular metal, based on a 15mL volume. The reporting limit is 0.03ug for Cadmium, 0.15ug for Arsenic, Barium, Lead and Silver, and 0.75ug for Chromium and Selenium.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Unless otherwise noted, samples are reported without a dry weight correction. Sample location, description, area, volume, etc., was provided by the client. If the report does not contain the result for a field blank, it is due to the fact that the client did not include a field blank with their samples. These sample results do not reflect blank correction. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C.

LEGEND

ug = microgram

ug/m³ = micrograms per cubic meter

mL = milliliter

L= Liters

ENVIRONMENTAL HAZARDS SERVICES, LLC

Metals Chain of Custody Form

Page 1 of 1

Company Name	OCCU-TEC Inc.						Account #	202507								
Company Address	2604 NE Industrial Drive Suite 230						City/State/Zip	North Kansas City, MO 64117								
Phone	816-231-5580						Email	jarnold@occutech.com								
Project Name / Testing Address		GSA Goodfellow Complex														
PO Number	925001						Collected By	Justin Arnold								
Turn-Around Time	<input checked="" type="radio"/> 5 Day <input type="radio"/> 3 Day <input type="radio"/> 2 Day <input type="radio"/> 1 Day <input type="radio"/> Same Day / Weekend - Must Call Ahead															
LAB NUMBER	Client Sample ID	Collection Date & Time	METALS						Other Metals	PARTICULATES			AIR			WIPES
			Pb TCLP	TCLP RCRA 8	RCRA 8 Total	Toxic Metal Profile	Welding Fume Profile	TX 11 TCLP		CA 17 Total	Total Nuisance Dust	Respirable Dust	TSP Gravimetric	TSP Pb	PM-10	
1	110-A-01	11/14/25 0949-											234	2.54	599.4	x
2	110-A-02	0952-											234	2.54	599	x
3	110-A-03	0954-											233	2.57	598.8	x
4	110-A-04	0959-											232	2.57	596.2	x
5	110-A-05	1001-											231	2.54	591.4	x
6	110-A-06	↓											NA	NA	NA	x
7																x
8																x
9																x
10																x
11																x
12																x
13																x
14																x
15																x
Released By:		Justin Arnold						Date:	1/15/25		Time:		1530			
Signature:		(b) (6)						LAB USE ONLY - BELOW THIS LINE								

Received By:

(b) (6)

Signature:

Date: 1/16/25

Time: 1560

AM PM

25-01-02700



Due Date:

01/24/2025

(Friday)

AE

APPENDIX C
QUALIFICATIONS AND LICENSES

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

LEAD ABATEMENT OCCUPATION LICENSE

Issued to:

Justin Arnold

The person, firm or corporation whose name appears on this certificate has fulfilled the requirements for licensure as set forth in the Missouri Revised Statutes 701.300-701.338, as long as not suspended or revoked, and is hereby authorized to engage in the activity listed below.

Lead Risk Assessor

Category of License

Issuance Date: **8/27/2024**

Expiration Date: **8/27/2026**

License Number: **120611-300003622**

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Paula F. Nickelson
Director
Department of Health and Senior Services