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February 6, 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  
Buildings – 105L  
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 15, 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 105L.

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 ( $\mu\text{m}$ ) 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 105L 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	<0.24	<0.25
Barium	<0.24	<0.25
Cadmium	<0.048	<0.050
Chromium	<1.20	<1.30
Lead	<0.24	<0.25
Selenium	<1.20	<1.30
Silver	<0.24	<0.25

Results of the air samples collected indicate that all of the air samples collected from Building 105L 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 105L Air Sample Results Summary Table				
Sample ID	Location	Analyte	Concentration (ug/m <sup>3</sup> )	Recommended Limits <sup>1</sup> (ug/m <sup>3</sup> )
105L-A-01	Breakroom	Arsenic	<0.25	10
		Barium	<0.25	500
		Cadmium	<0.050	5
		Chromium	<1.3	500
		Lead <sup>2</sup>	<0.25	1
		Selenium	<1.3	200
		Silver	<0.25	10
105L-A-02	East side of Room 111	Arsenic	<0.25	10
		Barium	<0.25	500
		Cadmium	<0.050	5
		Chromium	<1.3	500
		Lead <sup>2</sup>	<0.25	1
		Selenium	<1.3	200
		Silver	<0.25	10
105L-A-03	West side of Room 111	Arsenic	<0.24	10
		Barium	<0.24	500
		Cadmium	<0.048	5
		Chromium	<1.2	500
		Lead <sup>2</sup>	<0.24	1
		Selenium	<1.2	200
		Silver	<0.24	10
105L-A-04	Center of Hallway	Arsenic	<0.25	10
		Barium	<0.25	500
		Cadmium	<0.049	5
		Chromium	<1.3	500
		Lead <sup>2</sup>	<0.25	1
		Selenium	<1.3	200
		Silver	<0.25	10
105L-A-05	Field Blank	Arsenic	<0.15 ug	10
		Barium	<0.15 ug	500
		Cadmium	<0.030 ug	5
		Chromium	<0.75 ug	500
		Lead <sup>2</sup>	<0.15 ug	1
		Selenium	<0.75 ug	200
		Silver	<0.15 ug	10

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 2604 NE Industrial Drive Suite 230 North Kansas City, MO 64117	Report Number:	25-01-02708
		Received Date:	01/16/2025
		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 <sup>3</sup> )	Narrative ID
25-01-02708-001	105L-A-01	01/23/2025	Arsenic (As)	605.2	<0.15	<0.25	
			Barium (Ba)		<0.15	<0.25	
			Cadmium (Cd)		<0.030	<0.050	
			Chromium (Cr)		<0.75	<1.3	
			Lead (Pb)		<0.15	<0.25	
			Selenium (Se)		<0.75	<1.3	
			Silver (Ag)		<0.15	<0.25	
25-01-02708-002	105L-A-02	01/23/2025	Arsenic (As)	607.6	<0.15	<0.25	
			Barium (Ba)		<0.15	<0.25	
			Cadmium (Cd)		<0.030	<0.050	
			Chromium (Cr)		<0.75	<1.3	
			Lead (Pb)		<0.15	<0.25	
			Selenium (Se)		<0.75	<1.3	
			Silver (Ag)		<0.15	<0.25	
25-01-02708-003	105L-A-03	01/23/2025	Arsenic (As)	629.8	<0.15	<0.24	
			Barium (Ba)		<0.15	<0.24	
			Cadmium (Cd)		<0.030	<0.048	

# Environmental Hazards Services, L.L.C

Client Number: 202507

Report Number: 25-01-02708

Project/Test Address: GSA Goodfellow Complex

Lab Sample Number	Client Sample Number	Analyzed Date	Analyte	Air Volume (L)	Total Metal (ug)	Concentration (ug/m <sup>3</sup> )	Narrative ID
25-01-02708-004	105L-A-04	01/23/2025	Chromium (Cr)		<0.75	<1.2	
			Lead (Pb)		<0.15	<0.24	
			Selenium (Se)		<0.75	<1.2	
			Silver (Ag)		<0.15	<0.24	
			Arsenic (As)	612.5	<0.15	<0.25	
			Barium (Ba)		<0.15	<0.25	
			Cadmium (Cd)		<0.030	<0.049	
			Chromium (Cr)		<0.75	<1.3	
			Lead (Pb)		<0.15	<0.25	
25-01-02708-005	105L-A-05	01/23/2025	Selenium (Se)		<0.75	<1.3	
			Silver (Ag)		<0.15	<0.25	
			Arsenic (As)	0	<0.15	---	
			Barium (Ba)		<0.15	---	
			Cadmium (Cd)		<0.030	---	
			Chromium (Cr)		<0.75	---	
			Lead (Pb)		<0.15	---	
			Selenium (Se)		<0.75	---	
			Silver (Ag)		<0.15	---	

Environmental Hazards Services, L.L.C

Client Number: 202507

Report Number: 25-01-02708

Project/Test Address: GSA Goodfellow Complex

Lab Sample Number	Client Sample Number	Analyzed Date	Analyte	Air Volume (L)	Total Metal (ug)	Concentration (ug/m³)	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/m<sup>3</sup> = 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	10SL-B-01	1/15/25 0800 - 1204											244	244	605.2	x
2	10SL-B-02	0801-1207											244	2.47	607.4	x
3	10SL-B-03	0802-1208											244	2.54	629.8	x
4	10SL-B-04	0803-1209											244	2.49	612.5	x
5	10SL-B-05	0900 -											-	-	-	x
6																x
7	10SL-W-01	1/15/25 0809														12 x 12
8	10SL-W-02	0812														12 x 12
9	10SL-W-03	0814														12 x 12
10	10SL-W-04	0818														12 x 12
11	10SL-W-05	0822														12 x 12
12	10SL-W-04	0825														12 x 12
13	10SL-W-07	0830														12 x 12
14	10SL-W-08	0807														- x -
15																x
Released By:		Justin Arnold			Date:	1/15/25			Time:	1530						
Signature:		(b) (6)			LAB USE ONLY - BELOW THIS LINE											

Received By: DAV

(b) (6)

Signature:   

Date: 1/16/25 Time: 203

AM  PM

25-01-02708



Due Date:  
01/24/2025

(Friday)

AE

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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