
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 (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 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,

(b) (6)

Jeff T. Smith
Senior Project Manager

(b) (6)

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 ³)	Recommended Limits ¹ (ug/m ³)
105L-A-01	Breakroom	Arsenic	<0.25	10
		Barium	<0.25	500
		Cadmium	<0.050	5
		Chromium	<1.3	500
		Lead ²	<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 ²	<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 ²	<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 ²	<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 ²	<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

Fax Number:

Laboratory Results

Lab Sample Number	Client Sample Number	Analyzed Date	Analyte	Air Volume (L)	Total Metal (ug)	Concentration (ug/m ³)	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/m³)	Narrative ID
25-01-02708-004	105L-A-04	01/23/2025	Chromium (Cr)	612.5	<0.75	<1.2	
			Lead (Pb)		<0.15	<0.24	
			Selenium (Se)		<0.75	<1.2	
			Silver (Ag)		<0.15	<0.24	
			Arsenic (As)		<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	
			Selenium (Se)		<0.75	<1.3	
25-01-02708-005	105L-A-05	01/23/2025	Silver (Ag)	0	<0.15	<0.25	
			Arsenic (As)		<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/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/m ³ = 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@occutec.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	Total Time	Flow Rate	Vol.	AREA
																Min.	L/min	Total Liters	
1	105L-A-01	1/15/25 0800-1204							Ag, As, Ba, Cd, Cr, Pb, Se						244	244	605.2	x	
2	105L-A-02	0601-1207												244	247	607.4	x		
3	105L-A-03	0802-1208												244	254	622.8	x		
4	105L-A-04	0803-1209												244	249	612.5	x		
5	105L-A-05	0900-												-	-	-	x		
6																	x		
7	105L-W-01	1/15/25 0809															12 x 12		
8	105L-W-02	0812															12 x 12		
9	105L-W-03	0814															12 x 12		
10	105L-W-04	0818															12 x 12		
11	105L-W-05	0822															12 x 12		
12	105L-W-06	0825															12 x 12		
13	105L-W-07	0830															12 x 12		
14	105L-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: MBrown

(b) (6)

Signature: _____

Date: 1/16/25 Time: 203

☐ AM ☒ PM

☐ Portal Contact Added

25-01-02708



Due Date:
01/24/2025
(Friday)
AE

P

7469 WHITEPINE RD, RICHMOND, VA 23237 (800)-347-4010

RESULTS VIA CLIENT PORTAL AVAILABLE @ www.leadlab.com

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

Lead Licensing Program, PO Box 570, Jefferson City, MO 65102