

Riverside, MO 64150 Telephone: 816.231.5580 Fax: 816.231.5641 www.occutec.com

January 30, 2019

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 – #108B 4300 Goodfellow Boulevard St. Louis, Missouri 63120 OCCU-TEC Project No. 918004

Dear Ms. Czarnecki:

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

On December 21, 2018, Missouri licensed air sampling professionals 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 on Building #108B.

The proposed sampling scheme, the numbers of samples, sample distribution and general methodology was developed based on previous investigation methodology and in coordination with the GSA. Sample 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 300 liters. Air samples were submitted under chain-of-custody to Scientific Analytical Institute, Inc. (SAI), for independent analysis of RCRA metals in accordance with NIOSH Method 7300. SAI is accredited by the American Industrial Hygiene Association (AIHA) utilizing the Industrial Hygiene Proficiency Analytical Testing (IHPAT) program. SAI's IHPAT Laboratory ID is 173190.

Results of the air sampling are summarized in the table below by identifying the range of results for Building #108B 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	Highest
	Concentration	Concentration
	$(\mu g/m^3)$	$(\mu g/m^3)$
Silver (Ag)	< 0.68	< 0.68
Arsenic (As)	< 0.68	< 0.68
Barium (Ba)	< 0.10	< 0.10
Cadmium (Cd)	< 0.068	< 0.068
Total Chromium (Cr) *	1.4	1.4
Lead (Pb)	< 0.35	< 0.35
Selenium (Se)	< 0.68	< 0.68

* The laboratory reported trace amounts of total chromium above the laboratory detection limit on many samples, including field blanks. According to the lab, low levels of Chromium can be found as a contaminant in varying levels on MCE filters for different manufacturers and lots.

Results of the air samples collected indicate that **all** the air samples collected from Building #108B contained concentrations of RCRA metals below the laboratory's method reporting limit and the OSHA Permissible Exposure Limit (PEL) with the exception of total Chromium. As previously noted, the elevated total chromium results were likely due to contaminated MCE filter media. Sample locations and the corresponding results are summarized in the laboratory analytical results that are included in Appendix A. The air sampling professional's Missouri Lead license is in included in Appendix B.

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.

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,



Jeff T. Smith Senior Project Manager



Kevin Heriford Project Manager (QA/QC)

Appendices:

- A: Laboratory Analytical Results and Chain of Custody Documentation
- B: Qualifications and Licenses



Appendix A Laboratory Analytical Report and Chain of Custody Documentation





Airborne Metals Concentration by Inductively-Coupled Plasma Analysis (ICP)

NIOSH Method 7300



Riverside, MO 64150Date Reported:01/04/2019Project:GFC - Building 108BPage:1 of 1	Client:	Occu-Tec, Inc. 100 NW Business Park Ln.	Attn:	Kevin Heriford	Lab Order ID: Date Received:	51834412 12/27/2018
Project: GFC - Building 108B Page: 1 of 1		Riverside, MO 64150			Date Reported:	01/04/2019
	Project:	GFC - Building 108B			Page:	1 of 1

Sample ID	Description	Volume	Element	Reporting	Concentration	Concentration
Lab Sample IDLab NotesVolumeElement(L)	Limit (µg)	concentration (μg)	(μg/m ³)			
			Ag	0.25	< 0.25	< 0.68
			As	0.25	< 0.25	< 0.68
108B-MetA-1	Inside 108B		Ba	0.038	< 0.038	< 0.10
108D-MetA-1	Inside 108B	367.5	Cd	0.025	< 0.025	< 0.068
		_	Cr	0.25	0.51	1.4
			Pb	0.13	< 0.13	< 0.35
51834412IPA_1			Se	0.25	< 0.25	< 0.68
			Ag	0.25	< 0.25	
			As	As 0.25 < 0.25		
108B-MetA-2	Blank		Ba	0.038	< 0.038	
108B-MetA-2	Blank	-	Cd	0.025	< 0.025	< 0.025
			Cr	0.25	0.45	
			Pb	0.13	< 0.13	
51834412IPA_2			Se	0.25	< 0.25	

Melissa Ferrell (2)

Analyst

Lab Director

(b) (6)

This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by AIHA or any other agency of the U.S. government. Scientific Analytical Institute participates in the AIHA IHPAT program. IHPAT Laboratory ID: 173190. Unless otherwise noted blank sample correction was not performed on analytical results. MDLs are available upon request. Reporting limits stated above.



Scientific Analytical Institute 4604 Dundas Dr. Greensboro, NC 27407 Phone: 336.292.3888 Fax: 336.292.3313 www.sailab.com lab@sailab.com

Lab Use Only Lab Order ID: <u>51834417</u> Client Code: _____

Contact Information	on	
Company Name: OCC	1-TEC. Inc	
Address: 100 NW	Business Pa	rk Lane.
	MO 64150	
Contact: Kevin He	riford	
Phone : 816 - 825 -		
Fax : 816 - 994-	-	
Email : Kheriford		n
PO Number: 918004		
Project Name/Number: 6	FC - Building	108B
	0	•
Lead Test Types	and a second	
Paint Chips by Flame AA (PBP)	Soil by Flame AA (PBS)	Other
Wipe by Flame AA (PBW)	Air by Flame AA (PBA)	KCRA8 w/o Hg

Billing/I	nvoice Information
Company:	OCCU-TEC, Tre.
Address: 10	DO NW Business Park Ln
Rivers	ide MO 64150
Contact: A	counts Payable
Phone :	
Fax :	
Email :	ap a racutec. com

Turn Aro	und Ti	imes	-
3 Hours		72 Hours	
6 Hours		96 Hours	
12 Hours		120 Hours	A
24 Hours		144+ Hours	
48 Hours			

Sample ID #	Description Location	Volume/Area	Comments
	Inside 108B	367.5	
1086-MetA-1 1086-MetA-2	Blank	367.5	
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Relinquished by
(b) (6)Date/Time
12/26Received by
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12-77-18 ClOpPage ___ of ___

Appendix B Qualifications and Licenses



STATE OF MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES

LEAD OCCUPATION LICENSE REGISTRATION

Issued to:

Austin G. O'Byrne

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: Expiration Date: License Number: 12/10/2018 12/10/2020 181210-300005671

(b) (6)

Randall W. Williams, MD, FACOG Director Department of Health and Senior Services

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