OCCU-TEC

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November 1, 2019

Diane Czarnecki
Industrial Hygienist
Facilities Management Division
GSA Public Buildings Service - Heartland Region
2300 Main Street, Kansas City, MO 64108

RE: Goodfellow Federal Center – Bldg. # 104F Air Sampling for Total Chromium
Project # 919103

Dear Ms. Czarnecki:

Thank you for the opportunity to provide the General Services Administration (GSA) with the above referenced environmental sampling activities. The following is our report.

INTRODUCTION

As requested, OCCU-TEC, Inc. (OCCU-TEC) conducted air sampling for the presence of total chromium at Building #104F of the Goodfellow Federal Center (GFC) located at 4300 Goodfellow Federal Boulevard in St. Louis, Missouri. Sampling was completed in response to the ongoing environmental condition assessment at the GFC which is documented at the GFC Reading Room located at:
https://www.gsa.gov/portal/content/212361.

Air sampling was conducted to determine the current levels of total chromium in representative locations throughout the building. Air sampling at Bldg. #104F was conducted on September 24, 2019 by Mr. Austin O'Byrne of OCCU-TEC.

METHODOLOGY

Air sampling for chromium was collected on 37-millimeter (mm) cassettes with 0.5 micrometer (µm) polyvinyl chloride (PVC) 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 chromium 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.

Air sampling for the presence of chromium was conducted at eight (8) distinct locations within Building #104F. A total of nine (9) samples were obtained including field blanks. Sample location diagrams are attached as Appendix B. The air sampling professional's Missouri Lead license is included in Appendix D.

RESULTS AND DISCUSSION

A summary table of all sampling locations is included in Appendix A. The complete laboratory report for the air sampling from Scientific Analytical Institute is attached in Appendix C.

All results were below the Agency for Toxic Substances and Disease Registry (ATSDR) minimum risk level (MRL), the NIOSH recommended exposure limit (REL) and the laboratory's reporting limit (RL).

LIMITATIONS

The scope of this assessment was limited in nature. OCCU-TEC collected samples from a select number of locations in an effort to minimize cost while providing a general overview of the air quality at the site. Samples were only analyzed for chromium in accordance with the scope of services requested by GSA. OCCU-TEC is not responsible for potential contaminants not identified in this report.

This report was prepared for the sole use of GSA. Reliance by any party other than GSA is expressly forbidden without OCCU-TEC's written permission. Any parties relying on the report, with OCCU-TEC's written permission, are bound by the terms and conditions outlined in the original proposal as if said proposal was prepared for them.

OCCU-TEC appreciates the opportunity to work with the GSA on this project. Please contact us if you have any questions regarding this report or if we may be of any additional service.

Sincerely,

(b) (6)

Jeff T. Smith
Senior Project Manager

(b) (6)

Austin O'Byrne
Environmental Scientist (QA/QC)

ATTACHMENTS

Appendix A, Sample Summary by Location
Appendix B, Sample Location Diagrams
Appendix C, Laboratory Analytical Results and Chain of Custody Documentation
Appendix D, Qualifications and Licenses

Appendix A

Sample Summary by Location

Goodfellow Federal Center - Building # 104F - Air Sample Data

Sample Number	Location	Analyte	Result ($\mu g/m^3$)	Minimal Risk Level *(MRL) ($\mu g/m^3$)	Recommended Exposure Limit** (REL) ($\mu g/m^3$)
104F-Cr-01	Upper Level at Column O-36	Chromium	< 1.20	5.00	500.00
104F-Cr-02	Upper Level at Column L-34	Chromium	< 1.20	5.00	500.00
104F-Cr-03	Upper Level at Column P-32	Chromium	< 1.20	5.00	500.00
104F-Cr-04	Upper Level at Column M-29	Chromium	< 1.20	5.00	500.00
104F-Cr-05	Lower Level at Column O-28	Chromium	< 1.20	5.00	500.00
104F-Cr-06	Lower Level at Column L-31	Chromium	< 1.20	5.00	500.00
104F-Cr-07	Lower Level at Column O-35	Chromium	< 1.20	5.00	500.00
104F-Cr-08	Lower Level at Column L-36	Chromium	< 1.20	5.00	500.00
104F-Cr-09	Field Blank	Chromium	< 1.20	5.00	500.00

* MRLs are Agency for Toxic Substances and Disease Registry (ATSDR) estimates of the amount of a chemical a person can eat, drink, or breathe each day without a detectable risk to health

**RELs are based on Appendix C (Supplementary Exposure Limits) of the National Institute for Occupational Safety and Health (NIOSH) Pocket Guide to Chemical Hazards, DHHS (NIOSH) Publication No. 2005-149. Revised September 2007.

Indicates results at or above MRL

Appendix B

Sample Location Diagrams

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Figure 1: Air Sample Location Maps—Bldg. 104F
Goodfellow Federal Center
4300 Goodfellow Boulevard
St. Louis, Missouri
Project Number: 919103

Appendix C

Laboratory Analytical Results and Chain of Custody Documentation

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

NIOSH Method 7303

Client:	OCCU-TEC Inc. 2604 NE Industrial Drive, Ste 230 North Kansas City, MO 64117	**Attn:**	**Justin Arnold**	**Lab Order ID:** **Date Received:** **Date Reported:** **Date Amended:**	**71925159** **09/27/2019** **10/03/2019** **10/08/2019**
Project:	919103.001 GFC			**Page:**	**1 of 2**

Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
104F-Cr-01 *71925159IPA_1*	UL O36	403.2	Cr	0.50	< 0.50	< 1.2
104F-Cr-02 *71925159IPA_2*	UL L34	403.2	Cr	0.50	< 0.50	< 1.2
104F-Cr-03 *71925159IPA_3*	UL P32	403.2	Cr	0.50	< 0.50	< 1.2
104F-Cr-04 *71925159IPA_4*	UL M29	403.2	Cr	0.50	< 0.50	< 1.2
104F-Cr-05 *71925159IPA_5*	LL O28	403.2	Cr	0.50	< 0.50	< 1.2
104F-Cr-06 *71925159IPA_6*	LL L31	403.2	Cr	0.50	< 0.50	< 1.2
104F-Cr-07 *71925159IPA_7*	LL O35	403.2	Cr	0.50	< 0.50	< 1.2

Melissa Ferrell

Analyst

(b) (6)

Lab Director

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.

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

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Client:	OCCU-TEC Inc. 2604 NE Industrial Drive, Ste 230 North Kansas City, MO 64117	**Attn:**	**Justin Arnold**	**Lab Order ID:** **Date Received:** **Date Reported:** **Date Amended:**	**71925159** **09/27/2019** **10/03/2019** **10/08/2019**
Project:	919103.001 GFC			**Page:**	**2 of 2**

Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
104F-Cr-08	LL L36	403.2	Cr	0.50	< 0.50	< 1.2
71925159IPA_8						
104F-Cr-09	FB	-	Cr	0.50	< 0.50	-
71925159IPA_9						

Melissa Ferrell

Analyst

(b) (6)

Lab Director

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Scientific Analytical Institute, Inc.
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: 71925159
Client Code: _____

Company Contact Information	
Company: OCCU-TEC Inc.	Contact: Justin Arnold
Address: 2604 NE Industrial Drive, Suite 230	Phone ☐: 816-810-3276
North Kansas City, MO 64117	Fax ☐: 816-994-3478
	Email :jarnold@occutec.com

Billing/Invoice Information	Turn Around Times^	
SAME ■	90 Min. ☐	48 Hours ☐
Company:	3 Hours ☐	72 Hours ☐
Contact:	6 Hours ☐	96 Hours ☐
Address:	12 Hours ☐	120 Hours ■
	24 Hours ☐	144+Hours ☐
	^TATs not available for certain test types	
PO Number:		
Project Name/Number: 919083.001 GFC		

Industrial Hygiene Test Types	
Silica as Alpha Quartz (XSZ)* ☐ With Respirable Dust (XDZ) ☐	
Silica as Cristobalite (XSC)* ☐ With Respirable Dust (XDC) ☐	
Silica as Tridymite (XST)* ☐ With Respirable Dust (XDT) ☐	
Silica as Alpha Quartz, Cristobalite, Tridymite (XSA)* ☐ With Respirable Dust (XDA) ☐	
Silica Bulk (XSI)*	☐
Bulk Phase ID/Whole Rock (XUK)	☐
Total Dust NIOSH Method 0500 (GTD)	☐
Respirable Dust NIOSH Method 0600 (GRD)	☐
PCM NIOSH 7400-A Rules (PCM)	☐
B Rules (PCB) ☐ TWA (PTA) ☐	
TEM NIOSH 7402 (Asbestos) (TNI)	☐
Hexavalent Chromium (OSHA ID-215) (Note if from spray paint operations)	☐
Metals (NIOSH 7300) (Specify Metals Under Comments)	☐
Other NIOSH 7300	[x]
* *Modified NIOSH 7500 OSHA ID 142*	

Sample ID #	Description/Location	Volume/Area	Comments
104F-Cr-01	UL O36	403.2 L	Cr
104F-Cr-02	UL L34		Cr
104F-Cr-03	UL P32		Cr
104F-Cr-04	UL M29		Cr
104F-Cr-05	LL O28		Cr
104F-Cr-06	LL L31		Cr
104F-Cr-07	LL O35		Cr
104F-Cr-08	LL L36		Cr
104F-Cr-09	FB	N/A	Cr
			Cr
			Cr
			Cr
			Cr

Accepted ☑
Rejected ☐

Total # of Samples _____

Relinquished by	Date/Time	Received by	Date/Time
(b) (6)	9/25/19 17:00	(b) (6)	9/27 10:30a

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A-F-018 EXP: 2/4/2021

Appendix D

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

(b) (6) [redacted]

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

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