OCCU-TEC

100 NW Business Park Lane
Riverside, MO 64150
Telephone: 816.231.5580
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June 8, 2018

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 – 102E
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 Complex, in St. Louis, Missouri. OCCU-TEC Inc. (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 April 20, 2018, Missouri licensed air sampling professionals from OCCU-TEC conducted air sampling for the presence of seven (7) of the RCRA metals including Silver, Arsenic, Barium, Cadmium, Chromium, Lead, and Selenium. Sampling was conducted at Building 102E.

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 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 methodology. 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 according to NIOSH method 7300. SAI is accredited by the American Industrial Hygiene Association (AIHA) utilizing the Industrial Hygiene Proficiency Analytical Testing (IHPAT) program. SAI's AIHA IHPAT Laboratory identification number is 173190.

Results of the air sampling are summarized in the table below by identifying the range of results for Building 102E for each of the seven (7) metals that were sampled. **Samples with a "<" sign indicate that the results were below the laboratory's method reporting limit.**

Analysis	Lowest Concentration (µg/m³)	Highest Concentration (µg/m³)
Silver Ag	<6.2	<6.2
Arsenic As	<0.31	<3.1
Barium Ba	<0.062	2.3
Cadmium Cd	<0.062	<0.62
Total Chromium Cr	<6.2	1.8
Lead Pb	<0.31	10.0
Selenium Se	<0.62	<6.2

Results indicate that **all** of the air samples collected from Building 102E 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 laboratory analytical report. The air sampling professional's Missouri Lead license 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,

(b) (6)

Justin Arnold
Environmental Scientist

(b) (6)

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

Client:	**Occu-Tec, Inc**	**Attn:**	**Justin Arnold**	**Lab Order ID:**	**11811088**
	100 NW Business Park Ln			**Date Received:**	**05/04/2018**
	Riverside, MO 64150			**Date Reported:**	**05/14/2018**
Project:	**918004.002**			**Page:**	**1 of 4**

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
102E-MetA18-01	1st Floor Column M21	323.2	Ag	2.0	<2.0	<6.2
			As	0.10	<0.10	<0.31
			Ba	0.020	<0.020	<0.062
			Cd	0.020	<0.020	<0.062
			Cr	0.20	0.57	1.8
			Pb	0.10	<0.10	<0.31
11811088ICP_1			Se	0.20	<0.20	<0.62
102E-MetA18-02	1st Floor Column N23	323.2	Ag	2.0	<2.0	<6.2
			As	1.0	<1.0	<3.1
			Ba	0.20	<0.20	<0.62
			Cd	0.20	<0.20	<0.62
			Cr	2.0	<2.0	<6.2
			Pb	1.0	<1.0	<3.1
11811088ICP_2			Se	2.0	<2.0	<6.2
102E-MetA18-03	1st Floor Column O25	323.2	Ag	2.0	<2.0	<6.2
			As	1.0	<1.0	<3.1
			Ba	0.20	<0.20	<0.62
			Cd	0.20	<0.20	<0.62
			Cr	2.0	<2.0	<6.2
			Pb	1.0	<1.0	<3.1
11811088ICP_3			Se	2.0	<2.0	<6.2

Taylor Davis

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)

NIOSH Method 7300

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Project:	**918004.002**			**Page:**	**2 of 4**

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
102E-MetA18-04	1st Floor Column L27	323.2	Ag	2.0	<2.0	<6.2
			As	1.0	<1.0	<3.1
			Ba	0.20	<0.20	<0.62
			Cd	0.20	<0.20	<0.62
			Cr	2.0	<2.0	<6.2
			Pb	1.0	<1.0	<3.1
11811088ICP_4			Se	2.0	<2.0	<6.2
102E-MetA18-05	2nd Floor Column N21	323.2	Ag	2.0	<2.0	<6.2
			As	1.0	<1.0	<3.1
			Ba	0.20	<0.20	<0.62
			Cd	0.20	<0.20	<0.62
			Cr	2.0	<2.0	<6.2
			Pb	1.0	<1.0	<3.1
11811088ICP_5			Se	2.0	<2.0	<6.2
102E-MetA18-06	2nd Floor Column M22	323.2	Ag	2.0	<2.0	<6.2
			As	1.0	<1.0	<3.1
			Ba	0.20	<0.20	<0.62
			Cd	0.20	<0.20	<0.62
			Cr	2.0	<2.0	<6.2
			Pb	1.0	<1.0	<3.1
11811088ICP_6			Se	2.0	<2.0	<6.2

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Project:	**918004.002**			**Page:**	**3 of 4**

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
102E-MetA18-07	2nd Floor Column M26	323.2	Ag	2.0	<2.0	<6.2
			As	1.0	<1.0	<3.1
			Ba	0.20	<0.20	<0.62
			Cd	0.20	<0.20	<0.62
			Cr	2.0	<2.0	<6.2
			Pb	1.0	<1.0	<3.1
11811088ICP_7			Se	2.0	<2.0	<6.2
102E-MetA18-08	2nd Floor Column N27	323.2	Ag	2.0	<2.0	<6.2
			As	1.0	<1.0	<3.1
			Ba	0.20	<0.20	<0.62
			Cd	0.20	<0.20	<0.62
			Cr	2.0	<2.0	<6.2
			Pb	1.0	<1.0	<3.1
11811088ICP_8			Se	2.0	<2.0	<6.2
102E-MetA18-09	Exterior Roof	323.2	Ag	2.0	<2.0	<6.2
			As	1.0	<1.0	<3.1
			Ba	0.20	0.73	2.3
			Cd	0.20	<0.20	<0.62
			Cr	2.0	<2.0	<6.2
			Pb	1.0	3.3	10
11811088ICP_9			Se	2.0	<2.0	<6.2

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(b) (6) [redacted]

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Project:	**918004.002**			**Page:**	**4 of 4**

Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
102E-MetA18-10	Blank	0	Ag	2.5	<2.5	--
			As	0.13	<0.13	--
			Ba	0.025	<0.025	--
			Cd	0.025	<0.025	--
			Cr	0.25	0.41	--
			Pb	0.13	<0.13	--
11811088ICP_10			Se	0.25	<0.25	--

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Analyst

(b) (6)

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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: 1181088
Client Code: _____

Company Contact Information

Company: Occu-Tec	Contact: Justin Arnold
Address: 100 NW Business Park Lane	Phone ☐: 816-810-3276
Riverside, MO 64150	Fax ☐: 816-994-3478
	Email: jarnold@occutec.com

Billing/Invoice Information

SAME ☒
Company:
Contact:
Address:

PO Number: 2320180061
Project Name/Number: 918004.002

Turn Around Times^

90 Min. ☐	48 Hours ☐
3 Hours ☐	72 Hours ☐
6 Hours ☐	96 Hours ☐
12 Hours ☐	120 Hours ☐
24 Hours ☐	144+Hours ☒

^TATs not available for certain test types

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: RCRA 8 Us Hg NIOSH 7300 OSHA125	☒

* Modified NIOSH 7500/OSHA ID 142

Sample ID #	Description/Location	Volume/Area	Comments
102E-MetA18-01	1st floor Column M 21	323.2 L	
102E-MetA18-02	1st floor Column N 23	323.2 L	
102E-MetA18-03	1st floor Column O 25	323.2 L	
102E-MetA18-04	1st floor Column L 27	323.2 L	
102E-MetA18-05	2nd floor Column N 21	323.2 L	
102E-MetA18-06	2nd floor Column M 22	323.2 L	
102E-MetA18-07	2nd floor Column M 24	323.2 L	
102E-MetA18-08	2nd floor Column N 27	323.2 L	
102E-MetA18-09	Exterior Roof	323.2 L	
102E-MetA18-10	BLANK	—	

Accepted ☑
Rejected ☐

Total # of Samples 9

Relinquished by	Date/Time	Received by	Date/Time
(b) (6) [redacted]	4-30-18	(b) (6) [redacted]	10:30

Appendix B

Qualifications and Licenses

Missouri Department of Health and Senior Services
P.O. Box 570, Jefferson City, MO 65102-0570 Phone: 573-751-6400 FAX: 573-751-6010
RELAY MISSOURI for Hearing and Speech Impaired 1-800-735-2966 VOICE 1-800-735-2466

Peter Lyskowski
Acting Director

Jeremiah W. (Jay) Nixon
Governor

May 27, 2016

Justin Arnold
Occu-Tec, Inc.
100 NW Business Park Lane
Riverside, MO 64150

Dear Licensee:

After review of your renewal application for a license with the Missouri Department of Health and Senior Services' Lead Licensing Program, your application for a Lead Risk Assessor license has been approved.

Enclosed is your Lead Risk Assessor license certificate and photo identification badge. Please have your identification badge with you at all times while conducting lead abatement activities.

Note the date your Lead Risk Assessor license expires. A renewal application and information will be mailed to you approximately three months before your license expiration date and will need to be completed and submitted 60 days prior to the expiration date.

A requirement of renewing your application will be attending a Lead Risk Assessor refresher class. A list of Missouri accredited lead abatement training providers will be included in your renewal packet. Additional information on training and lead abatement in general can be found at http://health.mo.gov/safety/leadlicensing/index.php.

Please contact the Lead Licensing Program at (573) 526-5873 or (888) 837-0927 if you have any questions concerning this letter or on lead abatement regulations in general.

Sincerely,

(b) (6)

Angie DeBroeck
Lead Licensing Program

AKD:ss

Enclosures

Expiration Date: **N/A** Certificate Number: 7070111MOASP13670

Training Date: **7/1/2011**

Missouri State Certificate for Asbestos Related Occupations

issued by Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102
Phone (573) 751-4817

Justin E. Arnold

has successfully completed the requirements for certification as a AIR SAMPLING PROFESSIONAL. This Missouri State Certification is subject to review and the director may deny, suspend or revoke the certification per RSMo chapter 643.230.

7/5/2011
Date

(b) (6)
[redacted]
Director of Air Pollution Control Program