OCCU-TEC
2604 NE Industrial Drive, Suite 230
North Kansas City, Missouri 64117
Telephone: 816.231.5580
Fax: 816.231.5641
www.occutec.com

November 26, 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 - Mercury Air Sampling Investigation
Building – #106
4300 Goodfellow Boulevard
St. Louis, Missouri 63120
OCCU-TEC Project No. 919103

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 November 6, 2019, Missouri licensed air sampling professionals from OCCU-TEC conducted air sampling for the presence of airborne particulate mercury in Building #106.

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 particulate mercury 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 collected in accordance with NIOSH Method 7300 and submitted under chain-of-custody to Scientific Analytical Institute, Inc. (SAI), for independent analysis of mercury in accordance with NIOSH Method 6009. 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 results for Building #106 for the metal sampled. **Samples with a "<" sign indicate that the results were below the laboratory's method reporting limit.**

Analysis	Concentration ($\mu g/m^3$)
Mercury (Hg)	<0.057

Results of the air samples collected indicate Building #106 contained concentrations of particulate mercury below the laboratory's method reporting limit and the OSHA Permissible Exposure Limit (PEL). Sample location diagrams are attached is Appendix A. Sample locations and the corresponding results are summarized in the laboratory analytical results that are included in Appendix B. The air sampling professional's Missouri Lead license is in included in Appendix C.

It should be noted that this air sampling investigation was only a screening of airborne particulate mercury 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)

Jeff Smith,
Senior Project Manager

(b) (6)

Kevin Heriford
Environmental Operations Manager (QA/QC)

Appendices:

A: Sample Location Diagrams
B: Laboratory Analytical Results and Chain of Custody Documentation
C: Qualifications and Licenses

Appendix A

Sample Location Diagrams

(b) (7)(F)

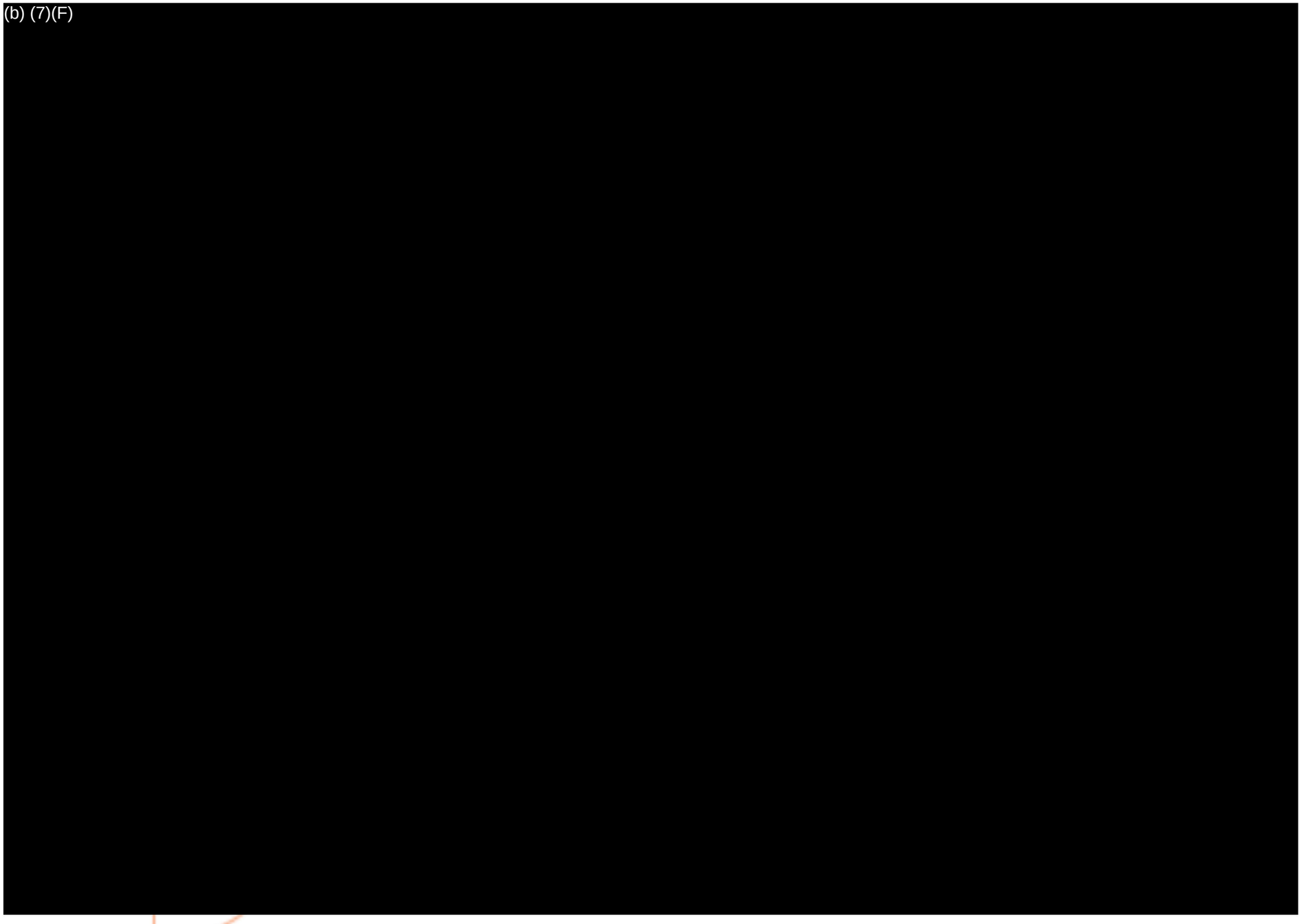

Figure 1: Air Sample Location Maps—Bldg. 106
Goodfellow Federal Center
4300 Goodfellow Boulevard
St. Louis, Missouri
Project Number: 919103

Appendix B

Laboratory Analytical Results and Chain of Custody Documentation

Airborne Mercury Concentration by Cold Vapor-Atomic Absorption (CVAA)

NIOSH Method 6009/OSHA ID-140

Client:	**OCCU-TEC Inc.**	**Attn:**	**Austin O'Byrne**	**Lab Order ID:**	**71928717**
	2604 NE Industrial Dr #230			**Date Received:**	**11/11/2019**
	North Kansas City, MO 64117			**Date Reported:**	**11/18/2019**
Project:	**919103.001**			**Page:**	**1 of 1**

Sample ID	**Description**	**Sampling Type**	**Volume (L)**	**Concentration (µg)**	**Concentration (µg/m³)**
Lab Sample ID	***Lab Notes***				
106-Hg-01	Field blank	**Particulate**	**-**	**< 0.025**	**-**
71928717HGA_1					
106-Hg-02	Guard station – front desk	**Particulate**	**436.8**	**< 0.025**	**< 0.057**
71928717HGA_2					

Melissa Ferrell

Analyst

(b) (6) [redacted]

Lab Director

This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. 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. The reporting limit for an undiluted air sample is 0.01µg total Mercury. Analytical uncertainty available upon request.

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: 71928717
Client Code: _____

Company Contact Information	
Company: OCCU-TEC Inc.	Contact: Austin O'Byrne
Address: 2604 NE Industrial Drive, Suite 230	Phone ☐: 816-602-0819
North Kansas City, MO 64117	Fax ☐: 816-994-3417
	Email : aobyrne@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: 919103.001		

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 6009 - Mercury Air Samples	☒
* Modified NIOSH 7500 OSHA ID 142	

Sample ID #	Description/Location	Volume/Area	Comments
106-Hg-01	Field Blank	N/A	Mercury Air Samples
106-Hg-02	Guard Station - Front desk	436.8	Mercury Air Samples
			Mercury Air Samples
			Mercury Air Samples
			Mercury Air Samples
			Mercury Air Samples

Accepted ☑
Rejected ☐

Total # of Samples _____

Relinquished by	Date/Time	Received by	Date/Time
(b) (6) [redacted]	11/8/19	(b) (6) [redacted]	11-11 10:38

Appendix C

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