July 9, 2019

Diane Czarnecki
Industrial Hygienist
Facilities Management Division
GSA Public Buildings Service - Heartland Region
U.S. General Services Administration
2300 Main Street, Kansas City, MO 64108

RE: Goodfellow Federal Center
Metals in Settled Dust Sampling – Building 103
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 metals in settled dust sampling investigation of Building 103, Columns E – J, 34 - 42 located at the Goodfellow Federal Center (GFC), in St. Louis, Missouri. OCCU-TEC, Inc. (OCCU-TEC) understands that the purpose of the investigation was to provide additional sampling data of existing environmental conditions within the Farm Service Agency (FSA) space prior to reoccupancy. The area was vacated during renovation activities within the new Census space that is adjacent. The following report summarizes the sample collection activities and the laboratory analytical results of samples submitted.

On July 2, 2019, OCCU-TEC personnel including a Missouri licensed lead risk assessor conducted settled dust sampling for the presence of seven of the Resource Conservation and Recovery Act (RCRA) target metals (lead, arsenic, barium, cadmium, total chromium, selenium, and silver) from various work surfaces within the soon to be occupied FSA areas of the second floor.

Metals in Settled Dust Sampling

Metals in settled dust sampling was conducted within columns E34 through J34 and E42 through J42.
Dust wipe sampling was conducted in accordance with ASTM Standard E1728-16: Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination. ASTM Standard E1728-16 is consistent with the methodology described in the Housing and Urban Development Guidelines and 40 CRF 745.63. The Brookhaven National Laboratory’s Surface Wipe Sampling Procedure (IH75190) was also used as a guideline.

Dust wipe sampling for the target metals was conducted on desk top surfaces throughout the space. A representative surface area of approximately one square foot (1 SF) was measured and delineated with pre-fabricated, disposable templates. The dust wipe samples were collected using dedicated dust wipe cloths meeting ASTM standards. Each dust wipe cloth was pre-moistened and individually wrapped. Each sample was collected by wiping in a back and forth “S” pattern over a measured sampling area. Then, the wipe was folded over itself and the area was wiped again in a direction perpendicular to the first wipe orientation. The wipe samples were then placed into labeled, clean laboratory-supplied plastic centrifuge tubes with screw on caps. Dust wipe samples were submitted to Scientific Analytical Institute, Inc. (SAI) in Greensboro, North Carolina for Inductively Coupled Plasma (ICP) analysis of metals analysis using Environmental Protection Agency (EPA) method SW846 350B/7420.

Results of the dust wipe samples collected from the building indicate that the three samples collected contained concentrations of target metals above laboratory detection limits. However, all of the samples collected contained target metals below the Brookhaven recommended levels.

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,

Justin Arnold, CIEC
Environmental Scientist

Kevin Heriford
Environmental Operations Manager (QA/QC)

Appendices:
A - Laboratory Analysis Reports
B - Licenses
Appendix A
Laboratory Analytical Reports
<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Description</th>
<th>Area (ft²)</th>
<th>*Element</th>
<th>Reporting Limit (µg)</th>
<th>Concentration (µg)</th>
<th>Concentration (µg/ft²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>103-W-23</td>
<td>2nd Floor Column F34 Desk</td>
<td>1</td>
<td>Ag</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>As</td>
<td>0.35</td>
<td>&lt; 0.35</td>
<td>&lt; 0.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ba</td>
<td>0.10</td>
<td>0.32</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cd</td>
<td>0.10</td>
<td>&lt; 0.10</td>
<td>&lt; 0.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cr</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
</tr>
<tr>
<td>71917413IPW_1</td>
<td></td>
<td></td>
<td>Pb</td>
<td>0.25</td>
<td>0.58</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Se</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
</tr>
<tr>
<td>103-W-24</td>
<td>2nd Floor Column G36 Desk</td>
<td>1</td>
<td>Ag</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>As</td>
<td>0.35</td>
<td>0.41</td>
<td>0.41</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ba</td>
<td>0.10</td>
<td>&lt; 0.10</td>
<td>&lt; 0.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cd</td>
<td>0.10</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cr</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
</tr>
<tr>
<td>71917413IPW_2</td>
<td></td>
<td></td>
<td>Pb</td>
<td>0.25</td>
<td>0.69</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Se</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
</tr>
<tr>
<td>103-W-25</td>
<td>2nd Floor Column F37 Desk</td>
<td>1</td>
<td>Ag</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>As</td>
<td>0.35</td>
<td>&lt; 0.35</td>
<td>&lt; 0.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ba</td>
<td>0.10</td>
<td>&lt; 0.10</td>
<td>&lt; 0.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cd</td>
<td>0.10</td>
<td>&lt; 0.10</td>
<td>&lt; 0.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cr</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
</tr>
<tr>
<td>71917413IPW_3</td>
<td></td>
<td></td>
<td>Pb</td>
<td>0.25</td>
<td>0.91</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Se</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>&lt; 0.50</td>
</tr>
</tbody>
</table>

Melissa Ferrell
Analyst

Lab Director

* SAI is AIHA ELLAP accredited for Pb only for dust wipe metals.

Unless otherwise noted blank sample correction was not performed on analytical results. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. MDLs are available upon request. Time-weighted average (TWA) calculations are based on customer supplied data and valid only for samples included in the specified TWA group. Scientific Analytical Institute participates in the AIHA ELPAT program. ELPAT Laboratory ID: 173190.
Dust Wipe Metals Concentration
by Inductively-Coupled Plasma Analysis (ICP)
NIOSH 7300/EPA SW-846 3050B

Client: Occu-Tec, Inc.
Attn: Justin Arnold
Lab Order ID: 71917413
100 NW Business Park Ln.
Riverside, MO 64150
Date Received: 07/03/2019
Date Reported: 07/05/2019
Project: 919103.01 Good Fellow

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Description</th>
<th>Area (ft²)</th>
<th>*Element</th>
<th>Reporting Limit (µg)</th>
<th>Concentration (µg)</th>
<th>Concentration (µg/ft²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Sample ID</td>
<td>Lab Notes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-W-26</td>
<td>Field Blank</td>
<td></td>
<td>Ag</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>As</td>
<td>0.35</td>
<td>&lt; 0.35</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ba</td>
<td>0.10</td>
<td>&lt; 0.10</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cd</td>
<td>0.10</td>
<td>&lt; 0.10</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cr</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pb</td>
<td>0.25</td>
<td>&lt; 0.25</td>
<td>-</td>
</tr>
<tr>
<td>71917413IPW_4</td>
<td></td>
<td></td>
<td>Se</td>
<td>0.50</td>
<td>&lt; 0.50</td>
<td>-</td>
</tr>
</tbody>
</table>

Melissa Ferrell
Analyst

(b) (6)

Lab Director

* SAI is AIHA ELLAP accredited for Pb only for dust wipe metals.

Unless otherwise noted blank sample correction was not performed on analytical results. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. MDLs are available upon request. Time-weighted average (TWA) calculations are based on customer supplied data and valid only for samples included in the specified TWA group. Scientific Analytical Institute participates in the AIHA ELPAT program. ELPAT Laboratory ID: 173190.
**Contact Information**

- **Company Name:** Ocu-Tec Inc.
- **Address:** 7404 NE Industrial Drive Suite 230
  North Kansas City, MO 64117
- **Contact:** Justin Arnold
- **Phone:** 816-810-3276
- **Fax:**
- **Email:** jarnold@ocutec.com
- **PO Number:**
- **Project Name/Number:** 719/03.01 Good Fellow

**Billing/Invoice Information**

- **Company:** Same info
- **Address:**
- **Contact:**
- **Phone:**
- **Fax:**
- **Email:**

**Turn Around Times**

- 3 Hours
- 6 Hours
- 12 Hours
- 24 Hours
- 48 Hours
- 72 Hours
- 96 Hours
- 120 Hours
- 144+ Hours

**Lead Test Types**

- Paint Chips by Flame AA (PBP)
- Soil by Flame AA (PBS)
- Wipe by Flame AA (PBW)
- Air by Flame AA (PBA)
- Other

**Sample ID #** | **Description/Location** | **Volume/Area** | **Comments**
--- | --- | --- | ---
103-W-23 | 2nd floor Column F 34 Desk | 1 SF | 
103-W-24 | 2nd floor Column G 34 Desk | 1 SF | 
103-W-25 | 2nd floor Column F 37 Desk | 1 SF | 
103-W-26 | Field Blank | NA | 

**Relinquished by**

- (b) (6)

**Date/Time**

- 7-1-19

**Received by**

- (b) (6)

**Date/Time**

- 7-1-19

Total Number of Samples **4**
Appendix
B
Qualifications and Licenses
STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

LEAD OCCUPATION LICENSE REGISTRATION

Issued to:

Justin E. 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: 6/11/2018
Expiration Date: 6/11/2020
License Number: 120611-300003622

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

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