June 29, 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  
Building #106  
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 26, 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 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 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 106 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.**

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Lowest Concentration (µg/m³)</th>
<th>Highest Concentration (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver Ag</td>
<td>&lt;6.2</td>
<td>&lt;6.2</td>
</tr>
<tr>
<td>Arsenic As</td>
<td>&lt;0.31</td>
<td>&lt;0.31</td>
</tr>
<tr>
<td>Barium Ba</td>
<td>&lt;0.062</td>
<td>&lt;0.062</td>
</tr>
<tr>
<td>Cadmium Cd</td>
<td>&lt;0.062</td>
<td>&lt;0.062</td>
</tr>
<tr>
<td>Total Chromium Cr</td>
<td>1.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Lead Pb</td>
<td>&lt;0.31</td>
<td>0.46</td>
</tr>
<tr>
<td>Selenium Se</td>
<td>&lt;0.62</td>
<td>&lt;0.62</td>
</tr>
</tbody>
</table>

Results indicate that all of the air samples collected from Building 106 contained concentrations of RCRA metals below 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 is 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**

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Description</th>
<th>Volume (L)</th>
<th>Element</th>
<th>Reporting Limit (µg)</th>
<th>Concentration (µg)</th>
<th>Concentration (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>106-MetA18-01</td>
<td>Guard Station West Side</td>
<td>323.2</td>
<td>Ag</td>
<td>2.0</td>
<td>&lt;2.0</td>
<td>&lt;6.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>As</td>
<td>0.10</td>
<td>&lt;0.10</td>
<td>&lt;0.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ba</td>
<td>0.020</td>
<td>&lt;0.020</td>
<td>&lt;0.062</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cd</td>
<td>0.020</td>
<td>&lt;0.020</td>
<td>&lt;0.062</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cr</td>
<td>0.20</td>
<td>0.65</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pb</td>
<td>0.10</td>
<td>&lt;0.10</td>
<td>&lt;0.31</td>
</tr>
<tr>
<td>106-MetA18-02</td>
<td>Guard Station East Side</td>
<td>323.2</td>
<td>Ag</td>
<td>2.0</td>
<td>&lt;2.0</td>
<td>&lt;6.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>As</td>
<td>0.10</td>
<td>&lt;0.10</td>
<td>&lt;0.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ba</td>
<td>0.020</td>
<td>&lt;0.020</td>
<td>&lt;0.062</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cd</td>
<td>0.020</td>
<td>&lt;0.020</td>
<td>&lt;0.062</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cr</td>
<td>0.20</td>
<td>0.56</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pb</td>
<td>0.10</td>
<td>0.15</td>
<td>0.46</td>
</tr>
<tr>
<td>106-MetA18-03</td>
<td>Blank</td>
<td>0</td>
<td>Se</td>
<td>0.20</td>
<td>&lt;0.20</td>
<td>&lt;0.62</td>
</tr>
<tr>
<td>11811087ICP_2</td>
<td></td>
<td></td>
<td>Se</td>
<td>0.20</td>
<td>&lt;0.20</td>
<td>&lt;0.62</td>
</tr>
<tr>
<td>11811087ICP_1</td>
<td></td>
<td></td>
<td>Se</td>
<td>0.20</td>
<td>&lt;0.20</td>
<td>&lt;0.62</td>
</tr>
</tbody>
</table>

**Taylor Davis**

**Analyst**

**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.

*Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407  (336) 292-3888*
### Industrial Hygiene Test Types

- Silica as Alpha Quartz (XSZ)*
- Silica as Cristobalite (XSC)*
- Silica as Tridymite (XST)*
- Silica as Tridymite, Tridymite (XSA)*
- Silica Bulk (XS)
- Bulk Phase ID/Whole Rock (XUK)
- Total Dust
- NIOSH Method 0500 (CTD)
- Respirable Dust
- NIOSH Method 0600 (CGD)
- OSHA 7800-Rules (CM)
- H Rules (PCH)
- TEM NIOSH 74/02 (Asbestos (TX))
- Hexavalent Chromium (OSHA ID-215) (Note if from spray paint operations)
- Metals (NIOSH 7500) (Specify Metals Under Comments)

*Modified NIOSH 7500/OSHA ID 142

---

### Sample Information

<table>
<thead>
<tr>
<th>Sample ID #</th>
<th>Description/Location</th>
<th>Volume/Area</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-MiA18-01</td>
<td>Guard Station West Side</td>
<td>323.2 L</td>
<td></td>
</tr>
<tr>
<td>101-MiA18-02</td>
<td>Guard Station East Side</td>
<td>323.2 L</td>
<td></td>
</tr>
<tr>
<td>102-MiA18-03</td>
<td>BLANK</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### Turn Around Times

<table>
<thead>
<tr>
<th>Turn Around Times</th>
<th>Friedman</th>
<th>48 Hours</th>
<th>72 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAME</td>
<td>90 Min.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company:</td>
<td>3 Hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact:</td>
<td>6 Hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td>12 Hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24 Hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*TAWs not available for certain test types

---

### Relinquished by

<table>
<thead>
<tr>
<th>Relinquished by</th>
<th>Date/Time</th>
<th>Received by</th>
<th>Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) (6)</td>
<td>1/30/2016</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Total # of Samples: 3**

---

**Page 1 of 1**
Appendix B
Qualifications and Licenses
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,

Angie DeBroeck  
Lead Licensing Program

AKD:ss

Enclosures
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

Director of Air Pollution Control Program