



April 16, 2021

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

Re: Goodfellow Federal Center – Building 104 DISC Generators Wipe Sampling Evaluation  
Project No. 121244

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, Burns & McDonnell conducted dust wipe sampling and testing for the presence of lead within the DISC emergency generator enclosures outside of Building 104 of the Goodfellow Federal Center located at 4300 Goodfellow Boulevard in St. Louis, Missouri. The purpose of the investigation was to provide sampling data regarding existing conditions to supplement previous investigation reports prepared for the facility. Dust wipe sampling was conducted on April 16, 2021 by Emily Ahlemeyer of Burns & McDonnell.

## **DUST WIPE SAMPLING AND RESULTS**

Dust wipe sampling was conducted in accordance with ASTM Standard E1728: *Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination* and ASTM Standard D6966: *Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Determination of Metals*. ASTM Standards E1728 and D6966 are consistent with the methodology described in the Housing and Urban Development Guidelines-Appendix 13.1 and 40 CFR 745.63. The Brookhaven National Laboratory's Surface Wipe Sampling Procedure (IH75190) was also used as a guideline.

A representative surface area of approximately one square foot (1 SF) was measured and delineated. The dust wipe samples were collected using dedicated dust wipe cloths meeting ASTM E1792 Standard. 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 using a clean, disposable glove. Then, the wipe was folded over itself and the area was wiped again in a direction perpendicular to the first wipe orientation. Then, the wipe folded over itself again and the area was wiped around the perimeter. The wipe samples were then placed into labeled, sealed containers. Dust wipe samples were submitted to EMSL Analytical, Inc. in St. Louis, MO for Lead in Dust by Flame Atomic Absorption analysis using Environmental Protection Agency (EPA) method SW846-3050B/7000B.



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Dust wipe sampling for the presence of lead was conducted at eight (8) distinct locations within the DISC generator enclosures. A total of nine (9) samples were obtained including one (1) field blank sample.

Eight (8) samples exceeded the lead clean area limit of 10 micrograms per square foot ( $\mu\text{g}/\text{sq. ft.}$ ). The specific sample locations and analytical results are presented in Appendix A. The complete laboratory report for the wipe sampling from EHS is attached in Appendix B.

### **LIMITATIONS**

The scope of this assessment was limited in nature. Burns & McDonnell collected samples from a representative number of surfaces in an effort to minimize cost while providing a general overview of site conditions. Sample locations do not encompass all equipment surfaces at the site. Additionally, samples were only analyzed for a select number of potential contaminants. Burns & McDonnell is not responsible for potential contaminants not identified in this report.

Burns & McDonnell appreciates the opportunity to work 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)

A large black rectangular redaction box covers the signature area, with the text "(b) (6)" in the top left corner.

Matt Shanahan, CHMM  
Project Manager

#### Attachments:

- Appendix A – Wipe Sampling Summary Table
- Appendix B – Wipe Sampling Laboratory Report

Information in Appendix B is not accessible for people using screen reader technology. If this information is required, it can be furnished upon request by contacting 816-223-6198 or [r6environmental@gsa.gov](mailto:r6environmental@gsa.gov).

**APPENDIX A – WIPE SAMPLING SUMMARY TABLE**

**Appendix A**  
**Wipe Sample Summary Table**

Sample Number	Location	Area Description	Analyte	Result	Units	Clean Area Limit*
104-W-01	DISC Generator D	Floor inside east doors	Lead	73 **	µg/ft <sup>2</sup>	10
104-W-02	DISC Generator D	Floor inside north door	Lead	76 **	µg/ft <sup>2</sup>	10
104-W-03	DISC Generator C	Cross beam inside east door	Lead	160 **	µg/ft <sup>2</sup>	10
104-W-04	DISC Generator C	Floor inside northwest door	Lead	270 **	µg/ft <sup>2</sup>	10
104-W-05	DISC Generator B	Floor inside east doors	Lead	250 **	µg/ft <sup>2</sup>	10
104-W-06	DISC Generator B	Floor inside northwest door	Lead	1,200 **	µg/ft <sup>2</sup>	10
104-W-07	DISC Generator A	Cross beam inside east door	Lead	660 **	µg/ft <sup>2</sup>	10
104-W-08	DISC Generator A	Floor inside northwest door	Lead	540 **	µg/ft <sup>2</sup>	10
104-W-09	Field Blank	--	Lead	< 10	µg	--

\* Clean Area Limit: Brookhaven references EPA/HUD limit for floors, set at 10 µg/sq. ft. as of January 2020.

\*\* Indicates results at or above the Clean Area Limit

µg/ft<sup>2</sup> - micrograms per square foot

**APPENDIX B – WIPE SAMPLING LABORATORY REPORT**



# EMSL Analytical, Inc.

100 Green Park Industrial Court, Saint Louis, MO 63123  
Phone/Fax: (314) 577-0150 / (314) 776-3313  
<http://www.EMSL.com> [saintlouislab@emsl.com](mailto:saintlouislab@emsl.com)

EMSL Order: 392103789  
CustomerID: BURN50  
CustomerPO:  
ProjectID:

Attn: **Emily Ahlemeyer**  
**Burns & McDonnell**  
**9400 Ward Parkway**  
**Kansas City, MO 64114**

Phone: (314) 302-4661  
Fax: (816) 822-3028  
Received: 4/15/2021 09:20 AM  
Collected:

Project: **GFC / 121244**

## Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)\*

Client SampleDescription	Collected	Analyzed	Area Sampled	RDL	Lead Concentration
104-W-01 392103789-0001		4/15/2021	144 in <sup>2</sup>	10 µg/ft <sup>2</sup>	73 µg/ft <sup>2</sup>
104-W-02 392103789-0002		4/15/2021	144 in <sup>2</sup>	10 µg/ft <sup>2</sup>	76 µg/ft <sup>2</sup>
104-W-03 392103789-0003		4/15/2021	144 in <sup>2</sup>	10 µg/ft <sup>2</sup>	160 µg/ft <sup>2</sup>
104-W-04 392103789-0004		4/15/2021	144 in <sup>2</sup>	10 µg/ft <sup>2</sup>	270 µg/ft <sup>2</sup>
104-W-05 392103789-0005		4/15/2021	144 in <sup>2</sup>	10 µg/ft <sup>2</sup>	250 µg/ft <sup>2</sup>
104-W-06 392103789-0006		4/15/2021	144 in <sup>2</sup>	50 µg/ft <sup>2</sup>	1200 µg/ft <sup>2</sup>
104-W-07 392103789-0007		4/15/2021	97.5 in <sup>2</sup>	15 µg/ft <sup>2</sup>	660 µg/ft <sup>2</sup>
104-W-08 392103789-0008		4/15/2021	144 in <sup>2</sup>	50 µg/ft <sup>2</sup>	540 µg/ft <sup>2</sup>
104-W-09 392103789-0009		4/15/2021	N/A	10 µg/wipe	<10 µg/wipe

(b) (6)

Jeff Siria, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. Analysis following Lead in Dust by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 10 ug/wipe. Ug/wipe = ug/ft2 x area sampled in ft2. Unless noted, results in this report are not blank corrected. The lab is not responsible for data reported in ug/ft2 which is dependent upon the area provided by non-lab personnel. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.  
Samples analyzed by EMSL Analytical, Inc. Saint Louis, MO AIHA-LAP, LLC-ELLAP Accredited #102636

Initial report from 04/15/2021 18:45:58