

July 18, 2024

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 107 Air and Wipe Sampling Evaluation Addendum 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 area air sampling and wipe sampling for the presence of seven (7) RCRA metals including arsenic, barium, cadmium, chromium, lead, selenium, and silver within the occupied areas of the first floor of building 107 of the Goodfellow Federal Center located at 4300 Goodfellow Boulevard in St. Louis, Missouri. The purpose of the investigation was to provide ongoing sampling data to monitor conditions at the site. This report serves as an addendum to the *Goodfellow Federal Center – Building 107 Air and Wipe Sampling Evaluation*, dated December 27, 2021.

SAMPLING METHODOLOGY

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 sample was then placed into a labeled, clean container.



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Air samples for RCRA metals were collected on 37-millimeter (mm) cassettes with 0.8 micrometer (µm) mixed cellulose ester (MCE) filters, using powered air sampling pumps, in accordance with the National Institute for Occupational Safety and Health (NIOSH) Method 7300. The sampling strategy included collecting a minimum sample volume of 500 liters based on the calibrated pump flow rate and sample duration.

All samples were submitted under chain-of-custody to Environmental Hazards Services, LLC (EHS) in Richmond, Virginia for independent analysis of 7 RCRA metals. Air samples were analyzed by Inductively Coupled Plasma (ICP) according to NIOSH method 7300. Wipe samples were analyzed according to Environmental Protection Agency (EPA) method SW846-3050B/6010D. EHS is accredited under the American Industrial Hygiene Association (AIHA) Industrial Hygiene Laboratory Accreditation Program (IHLAP) program, identification number LAP-100420.

SAMPLE SUMMARY AND RESULTS

Air and wipe samples were collected on July 02, 2024 by Ashley Anstaett of Burns & McDonnell.

One (1) air sample was collected on the 1st floor, break room, next to the sink. All analytes were below laboratory reporting limits. The complete air sampling laboratory report from EHS is included as Appendix A.

One (1) wipe sample was collected on the 1st floor, break room, from the top of the counter next to the microwaves. All analytes were below laboratory reporting limits. The complete wipe sampling laboratory report from EHS is included as 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 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 for GSA on this project. Please contact us if you have any questions regarding this report or if we may be of any additional service.



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Sincerely,



Matt Shanahan, CHMM Project Manager

Attachments:

Appendix A – Air Sampling Laboratory Report Appendix B – Wipe Sampling Laboratory Report

Information in Appendices A and B are 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.





7469 Whitepine Rd North Chesterfield, VA 23237 Telephone: 800.347.4010 Air Metals Analysis Report

Client: Burns & McDonnell Engineering

Report Number:

24-07-01781

9400 Ward Pkwy. Kansas City, MO 64114

Received Date:

07/11/2024

Reported Date:

07/16/2024

Project/Test Address: 168765; GFC/ 4300 Goodfellow Blvd

Client Number:

26-3514

Laboratory Results

Fax Number: 816-822-3494

Lab Sample Number	Client Sample Number	Analyzed Date	Analyte	Air Volume (L)	Total Metal (ug)	Concentration (ug/m³)	Narrative ID
24-07-01781-001	107-A-01	07/15/2024	Arsenic (As)	1153	<0.15	<0.14	
			Barium (Ba)		<0.15	<0.14	
			Cadmium (Cd)		<0.030	<0.027	
			Chromium (Cr)		<0.75	<0.66	
			Lead (Pb)		<0.15	<0.14	
			Selenium (Se)		<0.75	<0.66	
			Silver (Ag)		<0.15	<0.14	
24-07-01781-002	107-A-02	07/15/2024	Arsenic (As)		<0.15		
			Barium (Ba)		<0.15		
			Cadmium (Cd)		<0.030		
			Chromium (Cr)		<0.75		
			Lead (Pb)		<0.15		
			Selenium (Se)		<0.75		
			Silver (Ag)		<0.15		

Environmental Hazards Services, L.L.C

Client Number: 26-3514 Report Number: 24-07-01781

Project/Test Address: 168765; GFC/ 4300 Goodfellow Blvd

Lab Sample Client Sample Analyzed Analyte Air Total Metal Concentration Narrative Number Date Volume (L) (ug) (ug/m³) ID

Sample Narratives:

Method: NIOSH 7300M Analyst: Carlos Gonzalez

(b) (6)

Reviewed By Authorized Signatory:

Tasha Eaddy QA/QC Clerk

Sample Results denoted with a "less than" (<) sign contains less than the reporting limit for each particular metal, based on a 15mL volume. The reporting limit is 0.03ug for Cadmium, 0.15ug for Arsenic, Barium, Lead and Silver, and 0.75ug for Chromium and Selenium.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Unless otherwise noted, samples are reported without a dry weight correction. Sample location, description, area, volume, etc., was provided by the client. If the report does not contain the result for a field blank, it is due to the fact that the client did not include a field blank with their samples. These sample results do not reflect blank correction. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C.

LEGEND ug = microgram ug/m³ = micrograms per cubic meter
mL = milliliter L= Liters

ENVIRONMENTAL HAZARDS SERVICES, LLC

Metals Chain of Custody Form Pg_l of I Burns & McDonnell Company Name Account # 26-3514 9400 Ward Parkway Kansas City, MO 64114 Company Address City/State/Zip 314-636-233-1270 alanstaett@burnsmcd.com Phone Email Project Name / Testing Address | GFC / 4300 Goodfellow Blvd Collected By PO Number 168765 Anstalt Turn-Around Time 5 DAY X 3 DAY 2 DAY C 1 DAY SAME DAY OR WEEKEND - Must Call Ahead **METALS** PARTICULATES AIR WIPES Total Flow **Total Nuisance Dust** Toxic Metal Profile Welding Fume Profile Vol. **TSP Gravimetric** Time Rate Respirable Dust Client Collection RCRA 8 Total TX 11 TCLP AREA **FCLP RCRA** Pb TCLP Sample ID Date & Time Pb Other Circle The Unit of TSP Metals Total Mins. L/min. Liters cm or (In Ag, As, Ba, Cd, Cr, Pb, Se 107-A-01 7/2 1153 1438 Х 107-A-02 0702 Х 107-W-017/2 1425 12 × 12 107-W-02 7/2 NAXNA Х Х Х 10 11 12 Х 13

Date:

7/10/24

Anstaett

14

Released By:

24-07-01781

Due Date:
07/16/2024
(Tuesday)
EL MM-L

Time:

1700

Х





7469 Whitepine Rd North Chesterfield, VA 23237 Telephone: 800.347.4010

Wipe Metals Analysis Report

Client: Burns & McDonnell Engineering

9400 Ward Pkwy.

Kansas City, MO 64114

Received Date: 07/11/2024 Analyzed Date: 07/15/2024

Report Number:

Reported Date: 07/16/2024

Project/Test Address: 168765; GFC/ 4300 Goodfellow Blvd

Client Number:

26-3514

Laboratory Results

Fax Number: 816-822-3494

24-07-01776

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft²)	Total Metal (ug)	Concentration (ug/ft²)	Narrative ID
24-07-01776-001	107-W-01	Arsenic (As)	1.00	<2.50	<2.5	L01
		Barium (Ba)	1.00	<0.500	<0.50	L01
		Cadmium (Cd)	1.00	<0.100	<0.10	L01
		Chromium (Cr)	1.00	<1.00	<1.0	L01
		Lead (Pb)	1.00	<0.500	<0.50	L01
		Selenium (Se)	1.00	<2.50	<2.5	L01
		Silver (Ag)	1.00	<0.500	<0.50	L01
24-07-01776-002	107-W-02	Arsenic (As)		<2.50		L01
		Barium (Ba)		<0.500		L01
		Cadmium (Cd)		<0.100		L01
		Chromium (Cr)		<1.00		L01

Environmental Hazards Services, L.L.C

Client Number: 26-3514 Report Number: 24-07-01776

Project/Test Address: 168765; GFC/ 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft²)	Total Metal (ug)	Concentration (ug/ft²)	Narrative ID
		Lead (Pb)		<0.500		L01
		Selenium (Se)		<2.50		L01
		Silver (Ag)		<0.500		L01

Sample Narratives:

LO1: LCS and LCSD percent recovery for Se was outside of acceptance limits.

Analyst: Carlos Gonzalez

Method: EPA SW846 3050B/6010D

Reviewed By Authorized Signatory:

Tasha Eaddy QA/QC Clerk

Sample Results denoted with a "less than" (<) sign contains less than the reporting limit based on a 50mL volume. The reporting limit for Lead is 0.5ug.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Unless otherwise noted, samples are reported without a dry weight correction. Sample location, description, area, volume, etc., was provided by the client. If the report does not contain the result for a field blank, it is due to the fact that the client did not include a field blank with their samples. These sample results do not reflect blank correction. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C.

 Legend
 ug = microgram
 ug/ft² = micrograms per square foot

 mL = milliliter ft² = square foot

ENVIRONMENTAL HAZARDS SERVICES, LLC

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	Compa	any Name	Bur	Burns & McDonnell										Account #				910								
(Compan	any Address 9400 Ward Parkway										City/State/Zip			Zip	Kansas City, MO 64114										
Phone 314-636-233-1270											Email			al	an	staett@	@burn	smcd	com							
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Portal Contact Added

Portal Contact Added

RESULTS VIA CLIENT PORTAL AVAILABLE @ www.leadlab.com