

Lead Based Paint Inspection Report

Building 452 Hangar Columbus AFB Columbus, Mississippi

Prepared for:

Columbus Air Force Base FA3022 14 CONS LGCA 495 Harpe Blvd. Columbus, MS 39710-001

Prepared by:



Advanced Environmental Consultants, Inc. 775 North President Street Jackson, MS 39202

Project AEC 096.24

October 30, 2024

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LEAD-BASED PAINT INSPECTION

Advanced Environmental Consultants, Inc. (AEC) has completed a Lead-Based Paint Inspection for Columbus Air Force Base (Columbus AFB) (herein referenced as the client). AEC inspected Building 452 at Columbus AFB in Columbus, Mississippi for Lead-Based Paint in accordance with HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing and the OHHLHC Lead-Based Paint Hazard Controls. Testing was performed using the RMD Model LPA-1 XRF Analyzer, Serial Number 3378, State of Mississippi license GL-406, SSD# MA-0573-D-103-B).

Figure 1 illustrates the location member layout of the building. A copy of AEC licenses is included in Appendix A; XRF Results (Appendix B); Site Photographs (Appendix C), Brief Glossary (Appendix D), and Lead Resource Data (Appendix E).

1.0 SUMMARY

Table 1. General Information

Client	Columbus Air Force Base					
Site Address	Building 452 Hangar Columbus AFB 495 Harpe Blvd. Columbus, MS 39710-001 Date of Inspection					
Analytical Laboratory	SanAir Technologies Laboratory, Inc.					
Inspector	Kristian King (MDEQ Risk Assessor's Certificate No. PRA-00008692)					
Inspected Areas Interior and exterior of the building.						

2.0 SCOPE OF WORK

The scope of this Lead Based Inspection was to investigate and identify the presence of lead-based paint in the interior and exterior of the building referenced as the 452 Hangar as identified by Columbus AFB personnel. The testing included use of an XRF device to identify lead-based paint in the interior and exterior painted surfaces throughout the building.

3.0 FINDINGS

Lead-Based Paint was identified above the HUD limits of 1.0 mg/cm² in the interior and exterior areas tested of the building as outlined on the following page.

Exterior

Sliding Door Trim on Side C of the building.

<u>Interior</u>

- Door, Door Trim and Door Threshold on Side A in the Hangar of the building.
- Beam 2 on Side C in the Hangar of the building.
- Door on Side D in the Hangar of the building.
- Door 2 on Side A in the Hangar of the building.
- Door on Side B in the Hangar of the building.
- Door Threshold on Side B in the Hangar of the building.
- Door on Side D in the Maintenance area of the building.

4.0 CONCLUSIONS

AEC concludes that Lead-Based Paint was identified above the HUD limits of 1.0 mg/cm² in the areas outlined below in the building. In those areas that tested positive for lead-based paint, it should be noted that uniform color, texture and substrate yields homogeneous areas. In areas where lead-based paint was identified above the HUD limits, all homogeneous materials should be treated as lead-based paint.

Exterior

• Grey Painted Metal Sliding Hangar Door Trim on Side C of the building.

Interior

- Red Painted Metal Door, Red Painted Metal Door Trim and Red Painted Concrete Door Threshold on Side A in the Hangar of the building.
- Grey Painted Steel Beam 2 on Side C in the Hangar of the building.
- Red Painted Metal Door on Side D in the Hangar of the building.
- Red Painted Metal Door 2 on Side A in the Hangar of the building.
- Red Painted Metal Door on Side B in the Hangar of the building.
- Red Painted Concrete Door Threshold on Side B in the Hangar of the building.
- Red Painted Metal Door on Side D in the Maintenance Area of the building.

5.0 RECOMMENDATIONS

AEC recommends prior to any renovation that a MDEQ licensed Lead Abatement Firm and/or Lead Renovator Firm is utilized for removal and/or encapsulation of all lead components during renovation. AEC further recommends that the HUD and MDEQ guidelines be followed.

6.0 WARRANTY

This report is an instrument of service prepared for the exclusive use of the client as referenced in Table 1 and may not be reproduced or distributed without written authorization from said party. The services described in this report were performed

consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. The services were performed consistent with the agreement between AEC and the client. This report is solely for the use and information of the client or as otherwise noted. Any unauthorized use of this report is strictly prohibited, and AEC assumes no liability for any such use.

7.0 DISCLAIMER

The site that was inspected for this report is Building 452 Hangar located at Columbus AFB Base in Columbus, Mississippi. The type of investigation that was conducted is known as a Lead-Based Paint Inspection.

The protocol used to organize this report was derived from the HUD guidelines.

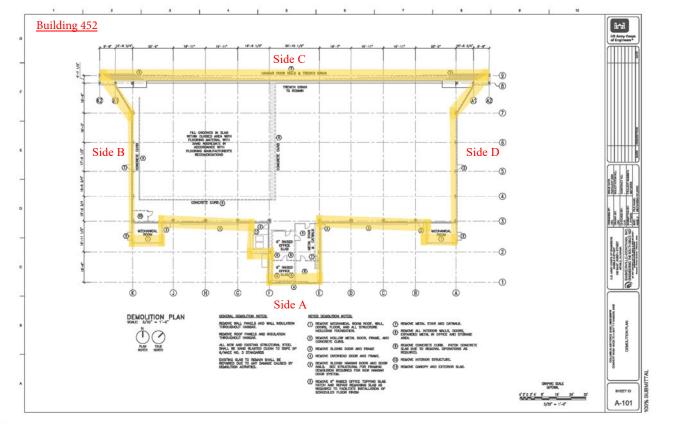
For the purposes of this report, lead-based paint is defined as containing equal to or more than 1.0 milligrams of lead per square centimeter. However, there may be surfaces and components on this property that contain less than the threshold amount that could still pose a hazardous health risk if disturbed. The Occupational Safety and Health Administration (OSHA) has regulations that may apply when painted surfaces are disturbed by people receiving compensation for the work.

The results of this Lead-Based Paint Inspection reflect the property on the day that the inspection was conducted on October 21, 2024. A reasonable attempt was made to include all like-painted surfaces in those areas shown by Columbus AFB personnel.

Any activity at the subject property after the date of the inspection visit could alter the results of this investigation. Even without activity, the results of this inspection are considered outdated after one year.

FIGURES

FIGURE 1 LOCATION MEMBER LAYOUT OF BUILDING



APPENDICES

APPENDIX A

LICENSES AND CERTIFICATIONS Lead Firm, Lead Risk Assessor, and XRF Specifications

State of Mississippi

Department of Environmental Quality
Office of Pollution Control

Certificate of Licensure

In accordance with the Lead-Based Paint Activity Accreditation and Certification Act, Mississippi Code Annotated Sections 49-17-501 through 49-17-531

Be it known that

Advanced Environmental Consultants, Inc.

Having submitted acceptable evidence of qualifications and other appropriate information, is hereby granted this

Lead Based Abatement Firm

Certification

Chief, Asbestos & Lead Branch

Certificate No.: PBF-00000013 Expiration Date: July 10th, 2025



State of Mississippi

TATE REEVES Governor

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHRIS WELLS, EXECUTIVE DIRECTOR

November 29, 2023

Kristian S King Advanced Environmental Consultants, Inc. 775 North President Street Jackson, Mississippi 39202

> Certificate of Licensure Re:

> > Lead Risk Assessor Certification

Your application for certification as a Lead Risk Assessor has been approved by the Lead Certification Branch in accordance with the Mississippi Regulations for Lead-Based Paint Activities, Miss. Code Annotated Sections 49-17-501 through 49-17-531. Your Mississippi Certification number is PRA-00008692 which is reflected on your enclosed Mississippi Certification identification card or certificate.

Your Mississippi Certification is valid through Nov 30th, 2024. In order to maintain certification as a Lead Risk Assessor, you must renew your license on or before the expiration date stated on your card or certificate and pay the renewal fee. If you should continue to perform lead-based paint activities after the expiration date, you will be in violation of the Mississippi Regulations for Lead-Based Paint Activities and may be cited for non-compliance.

It is your responsibility to ensure that you have met all the requirements for renewal of your lead certification.

If you have any questions, please feel free to contact Virginia Rickels at (601) 961-5777.

Sincerely,

Greg Mallery, P.E., Chief

Asbestos & Lead Branch

Enclosure

55163 LIC20230003

4 Aprievement

This is to certify that

Kristian S. King

Advanced Environmetal Consultants, Inc.

on the 25th of January, 2012 successfully completed the factory training for

RMD's LPA-1 Lead Paint Inspection System

including, but not limited to the topics of Radiation Safety, DOT Regulations, Hazmat Security Awareness and the Proper Use of the Instrument



30 Galen Street, Watertown, Massachusetts Kathleen Tighe, Sales Manager RMD



APPENDIX B XRF RESULTS

Client:	Columbus Air Force Base
Site Address:	Building 452 Hangar Columbus AFB Columbus, Mississippi
Project Number:	AEC 096.24

Operator:	Kristian King
RMD Model:	LPA-1 XRF Analyzer, Serial Number 3378
Action Level:	1.0 mg/cm ²
Inspection Date:	10/21/24
Total Readings:	105

Calibration Check (Calibration Block Value: 1.0 mg/cm)								
	1st	2nd	3rd	4th	5th	6th		
Entry	1.0	-0.1	1.0	-0.1	1.0	-0.1		
Exit	1.0	-0.1	1.0	-0.1	1.0	-0.1		

Sample #	Sample Location	Building Component	Location Member	Substrate	Color	Surface Condition	Lead Level (mg/cm²)
1	Hangar	Wall	Side A	S	Grey	D	-0.1
2	Hangar	Wall	Side B	S	Grey	D	-0.1
3	Hangar	Wall	Side C	S	Grey	D	-0.2
4	Hangar	Wall	Side D	S	Grey	D	-0.1
5	Hangar	Door	Side A	M	Red	D	2.0
6	Hangar	Door Trim	Side A	M	Red	D	1.0
7	Hangar	Door Threshold	Side A	С	Red	D	8.5
8	Hangar	Flooring	Ctr	С	Grey	D	-0.7
9	Hangar	Flooring	Ctr	С	Red	D	-0.2
10	Hangar	Flooring	Ctr	С	Yellow	D	-0.7
11	Hangar	Flooring	Ctr	С	Black	D	-0.2
12	Hangar	Beam 1	Side D	S	Grey	D	-0.2
13	Hangar	Beam 2	Side D	S	Grey	D	-0.1
14	Hangar	Beam 3	Side D	S	Grey	D	-0.1
15	Hangar	Beam 4	Side D	S	Grey	D	-0.1
16	Hangar	Slanted Beam 1	Side A	S	Grey	D	-0.5
17	Hangar	Slanted Beam 2	Side A	S	Grey	D	-0.4
18	Hangar	Slanted Beam 3	Side A	S	Grey	D	-0.4
19	Hangar	Slanted Beam 4	Side A	S	Grey	D	-0.3
20	Hangar	Slanted Beam 1	Side B	S	Grey	D	-0.2
21	Hangar	Slanted Beam 2	Side B	S	Grey	D	-0.1
22	Hangar	Slanted Beam 3	Side B	S	Grey	D	-0.3

Sample #	Sample Location	Building Component	Location Member	Substrate	Color	Surface Condition	Lead Level (mg/cm²)
23	Hangar	Slanted Beam 4	Side B	S	Grey	D	-0.4
24	Hangar	Slanted Beam 5	Side B	S	Grey	D	-0.5
25	Hangar	Beam 1	Side C	S	Grey	D	-0.3
26	Hangar	Beam 2	Side C	S	Grey	D	-0.4
27	Hangar	Beam 3	Side C	S	Grey	D	1.0
28	Hangar	Beam 4	Side C	S	Grey	D	-0.8
29	Hangar	Door	Side D	M	Red	D	1.0
30	Hangar	Door Trim	Side D	M	Red	D	-0.3
31	Hangar	Door Threshold	Side D	С	Red	D	-0.4
32	Hangar	Floor Bump	Ctr	С	Yellow	D	-1.1
33	Hangar	Door 1	Side C	M	Red	D	-0.0
34	Hangar	Door Trim 1	Side C	M	Red	D	-0.3
35	Hangar	Sliding Door Wall Trim – Vertical 1	Side C	С	Red	D	-0.5
36	Hangar	Sliding Door Wall Trim – Vertical 2	Side C	С	Red	D	-0.5
37	Hangar	Floor Trim	Side A	С	Yellow	D	-0.4
38	Hangar	Floor Trim	Side B	С	Red	D	-0.1
39	Hangar	Door 2	Side B	С	Red	D	-0.1
40	Hangar	Door Trim 2	Side B	С	Red	D	-0.2
41	Hangar	Door 2	Side A	M	Red	D	1.0
42	Hangar	Door Trim 2	Side A	M	Red	D	-0.3
43	Hangar	Door Threshold 2	Side A	С	Red	D	-0.4
44	Hangar	Door	Side B	M	Red	D	1.0
45	Hangar	Door Trim	Side B	M	Red	D	-0.3
46	Hangar	Door Threshold	Side B	С	Red	D	1.5
47	Hangar	Floor Trim	Side A	С	Yellow	D	-0.3
48	Hangar	Floor Trim	Side B	С	Yellow	D	-0.1
49	Maintenance	Wall	Side B	С	Beige	D	-0.1
50	Maintenance	Door	Side B	M	Brown	D	-0.3
51	Maintenance	Door Trim	Side B	M	Brown	D	-0.7
52	Maintenance	Wall Beam	Side D	M	Grey	D	-0.2
53	Maintenance	Door	Side D	M	Red	D	1.0
54	Maintenance	Door Trim	Side D	M	Red	D	-0.2
55	Maintenance	Door Threshold	Side D	С	Red	D	-0.6
56	Maintenance	Wall	Side D	S	Grey	D	-0.3
57	Men's Dressing Area	Partition Wall	Ctr	W	Beige	D	-0.7
58	Office 1	Wall	Side A	С	Tan	D	-0.6
59	Office 1	Wall	Side B	С	Tan	D	-0.6



Sample #	Sample Location	Building Component	Location Member	Substrate	Color	Surface Condition	Lead Level (mg/cm ²)
60	Office 1	Wall	Side C	С	Tan	D	-0.5
61	Office 1	Wall	Side D	С	Tan	D	-0.6
62	Office 1	Door	Side C	M	Grey	D	-0.1
63	Office 1	Door Trim	Side C	M	Grey	D	-0.3
64	Office 1	Door	Side D	M	Grey	D	-0.2
65	Office 1	Door Trim	Side D	M	Grey	D	-0.3
66	Office 2	Wall	Side A	D	Beige	D	-0.5
67	Office 2	Wall	Side B	D	Beige	D	-0.3
68	Office 2	Wall	Side C	С	Beige	D	-0.2
69	Office 2	Wall	Side D	D	Beige	D	-0.1
70	Office 2	Door Trim	Side A	W	Grey	D	-0.5
71	Exterior	Siding	Side A	S	Beige	D	-0.4
72	Exterior	Siding	Side B	S	Beige	D	-0.4
73	Exterior	Siding	Side C	S	Beige	D	-0.4
74	Exterior	Siding	Side D	S	Beige	D	-0.4
75	Exterior	Vertical Trim	Side A	M	Grey	D	-0.3
76	Exterior	Vertical Trim	Side B	M	Grey	D	-0.3
77	Exterior	Vertical Trim	Side C	M	Grey	D	-0.2
78	Exterior	Vertical Trim	Side D	M	Grey	D	-0.1
79	Exterior	Door	Side B	M	White	D	-0.1
80	Exterior	Door Trim	Side B	M	White	D	-0.1
81	Exterior	Sliding Door	Side C	M	White	D	-0.7
82	Exterior	Sliding Door Trim	Side C	M	Grey	D	1.0
83	Exterior	Door 1	Side C	M	Grey	D	-0.3
84	Exterior	Door Trim 1	Side C	M	Grey	D	-0.2
85	Exterior	Door 2	Side C	M	Grey	D	-0.3
86	Exterior	Door Trim 2	Side C	M	Grey	D	-0.3
87	Exterior	Door	Side D	M	Grey	D	-0.2
88	Exterior	Door Trim	Side D	M	Grey	D	-0.2
89	Exterior	Lower Trim	Side C	M	Beige	D	-1.0
90	Exterior	Door	Side B	M	Grey	D	-0.3
91	Exterior	Door Trim	Side B	M	Grey	D	-0.2
92	Exterior	Double Door	Side B	M	Grey	D	0.2
93	Exterior	Double Door Trim	Side B	M	Grey	D	0.2



Table Key:

M = Metal D = Drywall C = Concrete P = Plaster Ctr = Center

W = Wood T = Transite S = Steel C= Ceramic I = Intact

G = Gypsum Por = Porcelain B = Brick V = Vinyl D = Deteriorated

APPENDIX C SITE PHOTOGRAPHS

SITE PHOTOGRAPHS – Areas with Lead Based Paint Lead-Based Paint Inspection

Building 452 Hangar Columbus AFB Columbus, Mississippi



Door/ Door Trim/ Door Threshold Hangar (Side A)



Beam 3 Hangar (Side D)



Door Hangar (Side D)



Door 2 Hangar (Side A)

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Door Hangar (Side B)



Door Threshold Hangar (Side B)



Door Maintenance (Side D)



Sliding Door Trim Exterior (Side C)

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APPENDIX D BRIEF GLOSSARY

APPENDIX D

BRIEF GLOSSARY

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead contaminated dust, and removal of lead contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; post-abatement clearance testing; recordkeeping; and, if applicable, monitoring. (For full EPA definition, see 40 CFR 745.223).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.

Chewable surface: An interior or exterior surface painted with lead-based paint that a young child can mouth or chew. A chewable surface is the same as an "accessible surface" as defined in 42 U.S.C. 4851b(2). Hard metal substrates and other materials that cannot be dented by the bite of a young child are not considered chewable.

Deteriorated paint: Any paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Dripline/foundation area: The area within 3 feet out from the building wall and surrounding the perimeter of a building.

Dust-lead hazard: Surface dust in residences that contains an area or mass concentration of lead equal to or in excess of the standard established by the United States Department of Housing and Urban Development (HUD), Office of Lead Hazard Control and Healthy Home (OLHCHH). OLHCHH issued this policy guidance to establish new and more protective requirements for dust-lead action levels for its Lead-Based Paint Hazard Control (LBPHC) and Lead Hazard Reduction (LHRD) Demonstration Grantees. Effective April 1, 2017, all existing OLHCHH LBPHC and LHRD grantees will use the following dust-lead action levels and clearance action levels (or lower level if required by local, state, or tribal authorities having jurisdiction), where unit ug/sf means "micrograms of lead per square foot sampled" (this unit can also be written as ug/ft²). The revised action levels are ≥10 μg/ft² on floors and >100 μg/ft² on interior windowsills. Also called lead-contaminated dust.

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Garden area: An area where plants are cultivated for human consumption or for decorative purposes.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include, but are not limited to, specialized cleaning, repairs, maintenance, painting, temporary containment, and the establishment and operation of management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land use controls. Interim controls that disturb painted surfaces are renovation activities under EPA's Renovation, Repair and Painting Rule.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight (5000 mg/g, 5000 ppm, or 5000 mg/kg) as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead contaminated dust, lead contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA at 40 CFR 745.65, under Title IV of the Toxic Substances Control Act). Lead-based paint hazards include, for example, **paint-lead hazards**, **dust-lead hazards**, and **soil-lead hazards**.

Paint-lead hazard: Lead-based paint on a friction surface that is subject to abrasion and where a dust-lead hazard is present on the nearest horizontal surface underneath the friction surface (e.g., the window sill, or floor); damaged or otherwise deteriorated lead-based paint on an impact surface that is caused by impact from a related building component; a chewable lead-based painted surface on which there is evidence of teeth marks; or any other deteriorated lead-based paint in any residential building or child-occupied facility or on the exterior of any residential building or child-occupied facility.

Play area: An area of frequent soil contact by children of under age 6 as indicated by, but not limited to, such factors including the following: the presence of outdoor play equipment (e.g., sandboxes, swing sets, and sliding boards), toys, or other children's possessions, observations of play patterns, or information provided by parents, residents, care givers, or property owners.

Soil-lead hazard: Bare soil on residential property that contains lead in excess of the standard established by the EPA under Title IV of the Toxic Substances Control Act. EPA standards for soil-lead hazards, published at 40 CFR 745.65(c), as of the publication of this edition of these *Guidelines*, is 400 μ g/g in play areas and 1,200 μ g/g in the rest of the yard. Also called lead-contaminated soil.

APPENDIX E LEAD AND SAFETY RESOURCE DATA

APPENDIX E

LEAD AND LEAD SAFETY RESOURCE DATA

KEY UNITS OF MEASUREMENT

Gram (g or gm): A unit of mass in the metric system. A nickel weighs about 1 gram, as does a 1 cube of water 1 centimeter on each side. A gram is equal to about 35/1000 (thirtyfive thousandths of an ounce). Another way to think of this is that about 28.4 grams equal

μ**g (microgram):** A microgram is 1/1000th of a milligram. To put this into perspective, a penny weighs 2 grams. To get a microgram, you would need to divide the penny into 2 million pieces. A microgram is one of those two million pieces.

μg/dL (microgram per deciliter): used to measure the level of lead in children's and worker's blood to establish whether intervention is needed. A deciliter is a little less than a half a cup.

μg/ft² (micrograms per square feet): the unit used to express levels of lead in dust samples. All reports should report levels of lead in dust in µg/ft2.

mg/cm² (milligrams per square centimeter): used to report levels of lead in paint thru XRF testing.

ppm (parts per million): Typically used to express the concentrations of lead in soil. Can also be used to express the amount of lead in a surface coating on a mass concentration basis. This measurement can also be shown as: μg/g, mg/kg or mg/l.

ppb (parts per billion): Typically used to express the amount of lead found in drinking water. This measurement is also sometimes expressed as: µg/L (micrograms per liter).

EPA/HUD Lead-Based Paint and Lead-Based Paint Hazard Standards

Lead-Based Paint (may be determined in either of two ways)

• Surface concentration (mass of lead per area) 1.0 µg/cm²

 Bulk concentration (mass of lead per volume) 0.5%, 5000 µg/g, or 5000 ppm

Dust-thresholds for Lead-Contamination

 Floors $> 10 \mu g/ft^2$ $>100 \mu g/ft^2$ Interior Window Sills Window Troughs (clearance examination only) <100 μg/ft² Porch Floors (clearance examination only) <40 ug/ ft² EPA- NA

Soil-thresholds for Lead Contamination

• Play areas used by children under age 6 400 μg/g, or 400 ppm

 Other areas $1200 \mu g/g$, or 1200 ppm