

**ASBESTOS INSPECTION
UNION BUILDING**

PREPARED FOR:

**MICHIGAN STATE UNIVERSITY
OFFICE OF ENVIRONMENTAL AND OCCUPATIONAL SAFETY
C124 RESEARCH COMPLEX – ENGINEERING
EAST LANSING, MI 48824-1326**

EKS JOB NUMBER 3915

**PREPARED BY
EKS SERVICES INCORPORATED
1927 ROSA PARKS BLVD., SUITE 110
DETROIT, MI 48216**

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Asbestos Survey Report

Mary Lindsey-Frary
Office of Environmental and Occupational Safety
C124 Research Complex – Engineering
Michigan State University
East Lansing, MI 48824-1326

Date Reported: 07/
EKS Job No: 3915-Union

Location: Union Building – Michigan State University
East Lansing, MI

1.0 EXECUTIVE SUMMARY

Mary Lindsey-Frary of Michigan State University's Office of Environmental and Occupational Safety retained EKS Services Incorporated to perform an asbestos survey of Union Building (Building #6) on the campus of Michigan State University located in East Lansing, MI. The survey was conducted from July 5th-14th, 2005.

1.1 LIMITATIONS

There was no destructive sampling performed per Michigan State University. Exterior materials, i.e. roofing materials, were not looked at during the survey only interior materials.

There were also some inaccessible areas; access panel in Room 279 A, Room 204 B—door painted shut, Room 7, Room 8 A, Room SB13 A, Room 109 D and Penthouse through Room 409.

1.2 MATERIAL QUANTITIES

The following table gives a total quantity of the asbestos material identified within the surveyed area. The quantity is an estimate only. Table 1 consists of the asbestos-containing materials, Table 2 contains the non-asbestos-containing materials and Table 3 contains the assumed asbestos containing materials.

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**Table 1
Total Quantity**

Asbestos Material Identification	Total Quantity
0" – 2" Pipe Fitting	273 ln. ft.
12" x 12" Brown Floor Tile with Mastic (Tile only)	35 sq. ft.
12" x 12" Grey Floor Tile with Mastic (Tile only)	1,300 sq. ft.
12" x 12" Tan Floor Tile with Mastic (Mastic Positive)	470 sq. ft.
12" x 12" Wall Tile with Glue Pods (Glue Pods Positive)	2,040 sq. ft.
2" – 4" Pipe Fitting	117 ln. ft.
2" – 4" Pipe Insulation	593 ln. ft.
4" – 6" Pipe Fitting	21 ln. ft.
4" Green Baseboard with Mastic (Baseboard Positive)	183 ln. ft.
9" x 9" Black Floor Tile with Mastic (Tile only)	340 sq. ft.
9" x 9" Brown Floor Tile with Mastic (Tile only)	7,960 sq. ft.
9" x 9" Cream Floor Tile with Mastic (Tile & Mastic)	4,215 sq. ft.
9" x 9" Green Floor Tile with Mastic (Tile only)	2,530 sq. ft.
9" x 9" Red Floor Tile with Mastic (Tile only)	6,590 sq. ft.
Grey Sink Undercoating	30 sq. ft.
Spray-on	24,040 sq. ft.
Stucco Ceiling	8000 sq. ft.
White Cloth Isolation Joint	96 sq. ft.

**Table 2
Non-Asbestos Containing Materials List**

Material Identification	Total Quantity
0" – 2" Pipe Insulation	1,074 ln. ft.
12" x 12" Ceiling Tile with Glue Pods	4,340 sq. ft.
12" x 12" Cream Floor Tile with Mastic	5 sq. ft.
2' x 2' Ceiling Tile	30,690 sq. ft.
2' x 2' Smooth Ceiling Tile	10,950 sq. ft.
2' x 4' Ceiling Tile	160 sq. ft.
2' x 4' Insulation Tile Around HVAC Unit	2,250 sq. ft.
2' x 4' Smooth Ceiling Tile	2,510 sq. ft.
4" – 6" Pipe Insulation	220 ln. ft.
4" Black Baseboard	3,293 ln. ft.
4" Brown Baseboard	6,039 ln. ft.
4" Burgundy Baseboard	195 ln. ft.
4" Grey Baseboard	110 ln. ft.
4" Light Green Baseboard	60 ln. ft.
4" Pink Baseboard	250 ln. ft.
4" White Baseboard	340 ln. ft.
Black Isolation Joint	175 sq. ft.
Black Paper	40 sq. ft.
Black Paper Inside Wall	25 sq. ft.
Brown Paper	750 sq. ft.

**Table 2 (cont'd)
Non-Asbestos Containing Materials List**

Material Identification	Total Quantity
Door Frame Caulk	40 ln. ft.
Drywall	22,395 sq. ft.
Exposed Glue Pods	4,055 sq. ft.
Exposed Mastic	550 sq. ft.
Green HVAC Glue	430 sq. ft.
Plaster Ceiling	65,976 sq. ft.
Plaster Wall	131,325 sq. ft.
Red Fire Stop	10 ln. ft.
White Sink Undercoating	10 sq. ft.
Yellow Carpet Glue	71,630 sq. ft.

**Table 3
Assumed Asbestos Containing Material**

Material Identification	Total Quantity
12" x 12" Red, Black, Green Patterned Floor Tile with Mastic	80 sq. ft.
Fire Door	153 doors
Fire Door Frame	9 frames

2.0 ASBESTOS BULK SAMPLE ANALYSIS

An accredited laboratory that participates in a Quality Assurance Program for asbestos fiber identification analyzed the bulk samples. Analysis of the bulk samples were performed in accordance with the EPA and OSHA protocol for asbestos using polarized light microscopy (PLM) and dispersion staining by an NVLAP accredited laboratory. Carolina Environmental, Inc. analyzed the samples and the results can be found in Appendix A. During analysis the laboratory stopped at first positive per homogeneous material.

2.1 SAMPLING PROCEDURES

Field inspection alone is not conclusive to identify asbestos-containing materials. Therefore, bulk samples of suspected asbestos-containing materials were obtained using EPA/OSHA protocols by State accredited inspectors and analyzed to determine if asbestos fibers were present, and if found, the type(s) and percentage(s) of asbestos were reported.

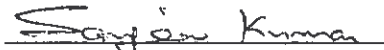
Wetting – An area approximately the size of a half dollar was thoroughly wetted using a plastic squeeze bottle containing water and a wetting agent, to reduce fiber release during sampling.

Sampling – A carpenter's knife or boring tool was used to cut the outer protective covering if needed to expose the suspected asbestos-containing material underneath. The boring tool or knife was then used to remove approximately 25 cubic centimeters of the

insulation or debris. The insulation or debris was then placed in a resoluble plastic bag and secured. EKS followed EPA and OSHA protocols for determining sampling locations and total numbers of samples taken.

3.0 CLOSING

Attached are the laboratory results of the samples collected. Please feel free contact me at (313) 963-1433, if you have any questions. It has been a pleasure assisting you.



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Asbestos Building Inspector
EKS Services Incorporated