ASBESTOS INSPECTION WONDERS HALL

PREPARED FOR:

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

EKS JOB NUMBER 3915

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Asbestos Survey Report

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

Date Reported: 06/07/05 EKS Job No: 3915-Wonders

Location: Wonders Hall - 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 Wilson Hall (Building #323) on the campus of Michigan State University located in East Lansing, MI. The survey was conducted from May 16-25, 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.

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.

Table 1
Total Quantity

Asbestos Material Identification	Total Quantity	
0" – 2" Pipe Insulation	8,700 ln. ft.	
10" – 12" Pipe Fittings	23 ln. ft.	
10" – 12" Pipe Insulation	148 ln. ft.	
2" – 4" Pipe Fittings	704 ln. ft.	
2" – 4" Pipe Insulation	8,876 ln. ft.	
4" – 6" Pipe Fittings	715 ln. ft.	
4" – 6" Pipe Insulation	1,745 ln. ft.	

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Table 1 (cont'd)
Asbestos Containing Materials List

Asbestos Material Identification	Total Quantity
6" – 8" Pipe Fittings	673 ln. ft.
6" – 8" Pipe Insulation	6,087 ln. ft.
8" – 10" Pipe Fittings	122 ln. ft.
8" – 10" Pipe Insulation	1,495 ln. ft.
9" x 9" Dark Brown Floor Tile with Mastic (Tile Only)	155,810 sq. ft.
9" x 9" Tan Floor Tile with Mastic (Tile and Mastic)	1,480 sq. ft.
9" x 9" Tan with Specks Floor Tile with Mastic (Tile and Mastic)	2,475 sq. ft.
Door Frame Caulk	140 ln. ft.
Green Tank Insulation	80 sq. ft.
Plaster Wall**	502, 450 sq. ft.
Spray-on	33,600 sq. ft.
Stucco Ceiling	1,860 sq. ft.
Valve Insulation	104 ln. ft.
Window Caulk	13,550 ln. ft.

^{**}Plaster Walls were sampled in five locations two of these locations contained asbestos in the second layer of plaster therefore the material is considered Positive for Asbestos. If a need arises for asbestos removal it will be more cost-effective to determine the extent of the Asbestos Plaster through more thorough sampling.

Table 2
Non-Asbestos Containing Materials List

Material Identification	Total Quantity	
0" – 2" Pipe Fittings	1,369 ln. ft.	
12" x 12" Ceiling Tile with Glue Pods	98,700 sq. ft.	
12" x 12" Cream Floor Tile with Mastic	1,285 sq. ft.	
12" x 12" Dark Red Floor Tile with Mastic	225 sq. ft.	
12" x 12" Metal Pan Ceiling Tile with Paper Backing	6,550 sq. ft.	
2' x 2' Ceiling Tile	1,010 sq. ft.	
4" Black Baseboard	955 ln. ft.	
4" Brown Baseboard	52,249 ln. ft.	
4" Cream Baseboard	250 ln. ft.	
4" Green Baseboard	811 ln. ft.	
4" Grey Baseboard	405 ln. ft.	
9" x 9" Light Brown Floor Tile with Mastic	1,335 sq. ft.	
Black Isolation Joint	70 sq. ft.	
Drywall/Drywall Ceiling	12,280 sq. ft.	
Exposed Glue Pods	6 sq. ft.	
Orange Carpet Glue	3,310 sq. ft.	
Plaster Ceiling/Beams	175,888 sq. ft.	
Shower Caulk	4,370 ln. ft.	
White Isolation Joint	60 ln. ft.	
White Sink Undercoating	60 sq. ft.	
Yellow Carpet Glue	83,140 sq. ft.	

Table 3 Assumed Asbestos Containing Material

Material Identification	Total Quantity
Fire Doors	82 doors

EKS collected three samples of 0"-2" Pipe Fittings which were all Negative for Asbestos, however, the 0"-2" pipe insulation did come back Positive for Asbestos.

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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