ASBESTOS INSPECTION
CASE 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

PREPARED BY
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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: 05/24/05
EKS Job No.: 3827

Location: Case 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 Case Hall (Building #321) on the campus of Michigan State University located in East Lansing, MI. The survey was conducted from May 10-23, 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 tables give a total quantity of the materials 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
Asbestos Containing Materials List

Asbestos Material Identification	Total Quantity
10" - 12" Pipe Fitting	78 ln. ft.
10" – 12" Pipe Insulation	367 ln ft.
18" – 20" Pipe Insulation	100 ln ft.
9" x 9" Dark Brown Floor Tile with Mastic**	75 sq. ft.
9" x 9" Dark Green floor Tile with Mastic	2324 sq. ft.
9" x 9" Grey Floor Tile with Mastic	48850 sq. ft.
9" x 9" Light Green Floor Tile with Mastic	42220 sq. ft.
9" x 9" Red Floor Tile with Mastic	3373 sq. ft.

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Table 1 (cont'd)
Asbestos Containing Materials List

Asbestos Material Identification	Total Quantity
9" x 9" Tan Floor Tile with Mastic	45939 sq. ft.
Blue Tank Insulation	800 sq. ft.
Grey Tank Insulation	170 sq. ft.
Plaster Wall***	600 sq. ft.
Trowled on Insulation	905 sq. ft.
Window Frame Caulk	356 ln. ft.

**9" x 9" Dark Brown Floor Tile with Mastic is negative however there was a second layer of tile found in one of the collected samples and this layer was found to be positive for asbestos. Therefore areas that contain two layers of tile should be considered positive for asbestos.

***Plaster Walls are negative however there was a mastic material found on one sample that resulted in a positive result without regaining access to this room this material cannot be re-evaluated. Per Mary Lindsey-Frary this material is to be left as positive until access to this room can be gained.

Table 2
Non-Asbestos Containing Materials List

Material Identification	Total Quantity
0" – 2" Pipe Fitting	568 ln. ft.
0" – 2" Pipe Insulation	1997 ln. ft.
12" x 12" Ceiling Tile with Glue Pods	28600 sq. ft.
12" x 12"Cream Floor Tile with Mastic	1780 sq. ft.
12" x 12" Cream with Blue Specks Floor Tile with Mastic	170 sq. ft.
12" x 12" Cream with Tan Specks Floor Tile with Mastic	1150 sq. ft.
12" x 12" Grey Floor Tile with Mastic	9395 sq. ft.
12" x 12" Metal Ceiling Tile with Paper Backing	1170 sq. ft.
18" – 20" Pipe Fitting	11 ln. ft.
2' x 2' Ceiling Tile	1080 sq. ft.
2' x 2' Smooth Ceiling Tile	800 sq. ft.
2" – 4" Pipe Fitting	417 ln. ft.
2" – 4" Pipe Insulation	2398 ln. ft.
4" – 6" Pipe Fitting	151 ln. ft.
4" – 6" Pipe Insulation	1608 ln. ft.
4" Black Baseboard	2060 ln. ft.
4" Blue Baseboard	50 ln. ft.
4" Brown Baseboard	48457 ln. ft.
4" Green Baseboard	2510 ln. ft.
4" Grey Baseboard	1583 ln. ft.
6" – 8" Pipe Fitting	184 ln. ft.
6" – 8" Pipe Insulation	1335 ln. ft.
8" – 10" Pipe Fitting	80 ln. ft.

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

Material Identification	Total Quantity
8" – 10" Pipe Insulation	465 ln. ft.
9" x 9" Dark Brown Floor Tile with Mastic	1095 sq. ft.
HVAC Cream Insulation	55 sq. ft.
Door Caulk	304 ln. ft.
Drywall	1480 sq. ft.
Exposed Glue Pods	10 sq. ft.
Isolation Joint	265 ln. ft.
Plaster Ceiling	169363 sq. ft.
Plaster Wall	409749 sq. ft.
Tan HVAC Caulk	1900 ln. ft.
Valve Insulation	16 ln. ft.
White Sink Caulk	26242 ln. ft.
Window Caulk	2270 ln. ft.
Yellow Carpet Glue	66970 sq. ft.
Radiator Caulk	210 ln. ft.
Red Fire Stop	2 sq. ft.

Table 3
Assumed Asbestos Containing Material

Material Identification	Total Quantity
Fire Door	59 doors

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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