

# **Michigan State University East Lansing, Michigan**

## **Asbestos Inspection Packaging Building**

**January 12, 2007  
Project No. G06676**



**Fishbeck, Thompson, Carr & Huber**  
engineers • scientists • architects • constructors

**MICHIGAN STATE UNIVERSITY  
EAST LANSING, MICHIGAN**

**PACKAGING BUILDING  
ASBESTOS INSPECTION**

**JANUARY 12, 2007  
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## LIST OF ACRONYMS

ACM	Asbestos-Containing Material
EMSL	EMSL Analytical, Incorporated, Ann Arbor, Michigan
FTC&H	Fishbeck, Thompson, Carr & Huber, Inc.
MSU	Michigan State University
OEOS	Office of Environmental and Occupational Safety
TSI	Thermal Systems Insulation

## INTRODUCTION

FTC&H was retained by MSU OEOS, East Lansing, Michigan, to conduct an asbestos building inspection of the Packaging Building, Building 177, original 1964 section. This building is located on Wilson Road on the MSU Campus in East Lansing, Michigan. FTC&H discussed the project with Mr. Andrew D. Smith, MSU-OEOS, prior to beginning the field work. The inspection was conducted in accordance with the FTC&H September 13, 2006, proposal to MSU.

## CERTIFICATION

The asbestos building inspection was conducted by Mr. Mark Nelson, State-of-Michigan Accredited Asbestos Inspector No. A33420. The bulk asbestos samples were analyzed by Polarized Light Microscopy by EMSL, which participates in the National Voluntary Laboratory Accreditation Program (Accreditation No. 101048-4).

## INSPECTION PROCEDURES AND SAMPLING METHODOLOGY

The survey was a functional space (room by room) survey, and was used to design the sampling plan. Materials of similar age and uniform color and texture were classified into homogeneous areas. Room by Room Asbestos Building Inspection Forms are provided in Appendix 1.

A minimum of one bulk asbestos sample was collected from miscellaneous materials; three to seven samples were collected from surfacing materials, depending on the area; and TSI. As required by MSU, the survey was limited to the building interior and outdoor mechanical systems. Samples were not collected from roofing or exterior materials. In addition, samples were not collected from operating machinery or fire doors.

All samples were collected by a State-of-Michigan Accredited Building Inspector. The samples were collected from areas considered representative of each homogeneous area. Destructive sampling was not conducted, and the samples were collected from accessible materials. Where appropriate, non-permanent labels were used to mark the sampling sites. Where necessary, sampling locations were repaired.

Twenty-four distinct homogeneous materials suspected of containing asbestos were identified during the inspection. The homogeneous materials are described on Table 1. A total of 44 bulk material samples were collected from the homogenous materials, and 53 total analyses were performed for asbestos. Bulk

material samples were collected from suspect ACMs according to the protocol described in 29 CFR 1926.1101 (Occupational Safety and Health Administration Asbestos Construction Standard). Sample locations are described on the Bulk Sample Log (Appendix 2) and located on the drawings included as Appendix 3.

## RESULTS

The samples were transported to EMSL for analysis. The analytical data report provided by EMSL is included as Appendix 4.

Of the 24 homogeneous materials sampled, a total of 12 homogenous materials were identified to contain asbestos above 1 percent by weight. The asbestos-containing homogeneous materials include:

- Mudded fittings in plenum and fan room (HA 1)
- Black lab bench in a hood (HA 4)
- Mudded fittings above first floor (HA 8)
- 9" x 9" floor tile – beige with streaks (HA 13)
- Seamless floor covering – black and white (HA 16)
- 4" green pipe fittings (HA 18)
- 1" green pipe fittings (HA 19)
- 1" silver pipe fittings (HA 20)
- 6" green pipe fittings (HA 21)
- 4" silver pipe fittings (HA 22)
- Light green pipe fittings (HA 23)
- 3" green pipe fittings (HA 24)

Homogeneous materials assumed to be ACM include:

- Fire doors

Homogeneous materials that are non-ACM include:

- 12" x 12" floor tile – white with light gray
- 4" brown cove base
- Black lab benches
- 2' x 2' ceiling tile with pinholes and fissures
- 1' x 1' ceiling tiles with fissures
- 12" x 12" floor tile – brown speckled
- 2' x 2' ceiling tile with fissures
- 2' x 4' ceiling tile with pinholes
- 9" x 9" floor tile – brown with streaks
- 12" x 12" floor tile – light brown with white streaks
- Drywall and mud

Estimated quantities of each homogeneous area by functional space are provided on the Room by Room Asbestos Building Inspection Forms (Appendix 1). Estimates of total quantity in the building for each homogeneous area are provided on Table 1.

The quantities provided within this report are only estimates. Additional materials may exist within wall cavities, above fixed ceilings, or other inaccessible areas that could not be evaluated as part of this survey. Non-destructive testing was conducted to collect buck samples. The samples collected were small in size and from inconspicuous areas.

## CONCLUSIONS

On October 10, 2006, a State-of-Michigan Accredited Asbestos Building Inspector conducted an inspection for asbestos at the MSU Packaging Building, Building 177. The ACMs found as a result of this inspection were 9" x 9" beige floor tile, black and white seamless floor covering, a hooded black lab bench and TSI in the form of mudded fittings in the plenum/fan room, above first floor ceilings and in basement mechanical areas.



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**Table 1 - Description of Homogeneous Materials**

Asbestos Inspection - Packaging  
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Material Description	Condition	Homogeneous Area No.	Asbestos Containing ?	Quantity	Unit
Mudded fittings	u	1	Y	69	l.f.
12"x12" floor tile - white with light gray	u	2	N	530	s.f.
4" brown cove base	u	3	N	450	l.f.
Black lab bench in hood	u	4	Y	20	s.f.
Black lab bench	u	5	N	805	s.f.
2'x2' ceiling tile with pinholes and fissures	u	6	N	1,863	s.f.
1'x1' ceiling tiles with fissures	u	7	N	1,722	s.f.
Mudded fittings - 1st floor	u	8	Y	51	l.f.
12"x12" floor tile - brown speckled	u	9	N	188	s.f.
4" black cove base	u	10	N	600	l.f.
2'x2' ceiling tile with fissures	u	11	N	235	s.f.
2'x4' ceiling tiles with pinholes	u	12	N	3,814	s.f.
9"x9" floor tile - beige with streaks	u	13	Y	364	s.f.
9"x9" floor tile - brown with streaks	u	14	N	16	s.f.
12"x12" floor tile - light brown with white streaks	u	15	N	940	s.f.
Seamless floor covering - black and white	u	16	Y	30	s.f.
Drywall and mud	u	17	N	4,080	s.f.
4" Green fittings	u	18	Y	39	l.f.
1" Green fittings	u	19	Y	19	l.f.
1" Silver fittings	u	20	Y	34	l.f.
6" Green fittings	u	21	Y	12	l.f.
4" Silver fittings	u	22	Y	55	l.f.
Light green fittings	u	23	Y	32	l.f.
3" green fittings	u	24	Y	1	l.f.

## Notes:

u = no damage observed  
sd = slightly damaged  
d = damaged  
l.f. = linear feet  
s.f. = square feet