

Michigan State University East Lansing, Michigan

Asbestos Inspection Purchasing Building

**January 12, 2007
Project No. G06677**



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

**MICHIGAN STATE UNIVERSITY
EAST LANSING, MICHIGAN**

**PURCHASING 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 Purchasing Building, Building 88, on Service Road. 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 September 13, 2006, FTC&H 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. 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, and TSI were sampled as necessary. As required by MSU, the survey was limited to the building interior. 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.

Seven distinct homogeneous materials suspected of containing asbestos were identified during the inspection. The homogeneous materials are described on Table 1. A total of 3 bulk material samples were collected from the homogenous materials, and 15 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 seven homogeneous materials sampled, a total of two homogeneous materials were identified to contain asbestos above 1% by weight. The asbestos-containing homogeneous materials include:

- 9" x 9" floor tile – beige (HA 4)
- Mud fittings (HA 6)

Homogeneous materials assumed to be ACM include:

- Fire doors

Homogeneous materials that are non-ACM include:

- 1' x 1" ceiling tiles with pinholes (HA 1)
- 4" brown cove base (HA 2)
- 2' x 2' suspended ceiling tile with pinholes (HA 3)
- 12" x 12" floor tile – beige (HA 5)
- Drywall with joint compound (HA 7)

Estimated quantities of each homogeneous area by function 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.

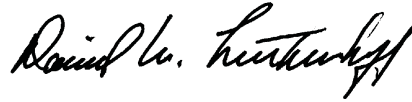
The quantities provided within this report are only estimates. Additional materials may exist within wall cavities, ceiling cavities, or other inaccessible areas that could not be evaluated as part of this survey. Non-destructive testing was conducted to collect the bulk samples. The samples collected were small in size and from inconspicuous areas. One sample of material that was adhered using mastics did not contain a sufficient amount of mastic for the laboratory to analyze. This homogeneous area was 12" x 12" beige floor tile. If these materials are to be removed, additional samples of the mastic may need to be collected to determine if they are ACM.

CONCLUSIONS

On October 13, 2006, a State-of-Michigan Accredited Building Inspector conducted an inspection for asbestos at the Purchasing Building, Building 88. The ACMs found as a result of this inspection were 9" x 9" beige floor tiles and TSI in the form of mudded fittings.



Mark R. Nelson
Building Inspector No. A33420



David W. Lutkenhoff, CIH, CIAQP

Table 1 - Description of Homogeneous Materials

Asbestos Inspection - Purchasing

Michigan State University, East Lansing, Michigan

Material Description	Condition	Homogeneous Area No.	Asbestos Containing ?	Quantity	Unit
1' x 1' ceiling tiles with pinholes	u	1	N	2,873	s.f.
4" brown cove base	u	2	N	1,368	l.f.
2' x 2' ceiling tile with pinholes	u	3	N	1,663	s.f.
9" x 9" floor tile - beige	u	4	Y	500	s.f.
12" x 12" floor tile - beige	u	5	N	150	s.f.
Mud fittings	u	6	Y	8	l.f.
Drywall and joint compound	u	7	N	13,150	s.f.

Notes:

u = no damage observed

sd = slightly damaged

d = damaged

l.f. = linear feet

s.f. = square feet