Michigan State University
East Lansing, Michigan

Asbestos Inspection
Engineering Research Building

January 12, 2007
Project No. G06670

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

MICHIGAN STATE UNIVERSITY

EAST LANSING, MICHIGAN

ENGINEERING RESEARCH BUILDING

ASBESTOS INSPECTION

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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

INTRODUCTION

FTC&H was retained by MSU OEOS, East Lansing, Michigan, to conduct an asbestos building inspection of the Engineering Research Building, Building 206, 1979 addition. This building is located at 2857 Jolly Road, Okemos, 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 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. The following rooms were not accessible during the inspection: Room 110 and Room 105. Room by Room Asbestos Building Inspection Forms are provided in Appendix 1.

A minimum of one bulk asbestos sample was collected from miscellaneous materials and three to seven samples were collected from surfacing materials. No suspect thermal systems insulation was found upon inspection. 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.

Fifteen distinct homogeneous materials suspected of containing asbestos were identified during the inspection. The homogeneous materials are described on Table 1. A total of 43 bulk material samples

were collected from the homogenous materials, and 69 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 5.

Of the 15 homogeneous materials sampled, a total of 3 homogenous materials were identified to contain asbestos above 1 percent by weight. The asbestos-containing homogeneous materials include:

- Brown seamless floor covering - backing only (HA 9)
- White seamless floor covering - backing only (HA 10)
- White 12” x 12” vinyl floor tile - backing only (HA 11)

Homogeneous materials assumed to be ACM include:

- Fire doors

Homogeneous materials that are non-ACM include:

- 4” white cove base (HA 1)
- 4” brown cove base (HA 2)
- 2” brown cove base (HA 3)
- 2’ x 2’ ceiling tile with pinholes and fissures (HA 4)
- 2’ x 2’ ceiling tile with large fissures (HA 5)
- 1’ x 1’ ceiling tile with patterned fissures (HA 6)
- 1’ x 1’ ceiling tile with fissures (HA 7)
- 2’ x 2’ ceiling tile with pinholes (HA 3)
- Drywall and mud (HA 12)
- Gray cove base (HA 13)
- 12” x 12” white floor tile with speckles (HA 14)
- Textured ceiling cover (HA 15)

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 Engineering Research Building, Building 206, 1979 addition. The ACMs found as a result of this inspection are shown on Table 1.

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