

Michigan State University East Lansing, Michigan

Asbestos Inspection Music Practice Building

**January 12, 2007
Project No. G06674**



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

**MICHIGAN STATE UNIVERSITY
EAST LANSING, MICHIGAN**

**MUSIC PRACTICE BUILDING
ASBESTOS INSPECTION**

**JANUARY 12, 2007
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LIST OF ACRONYMS

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|-------|--|
| 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 Music Practice Building, Building 21. This building is located on West Circle Drive 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 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: 40, 111, 115, 225, 226, 325, 326, 425, 426, 530, and 531. 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 and thermal systems insulations, depending on the quantity of material. Materials may be assumed to be ACM, based on the age and condition of the material or limited access. 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.

Fourteen distinct homogeneous materials suspected of containing asbestos were identified during the inspection. The homogeneous materials are described on Table 1. A total of 31 bulk material samples were collected from the homogenous materials, and 34 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 14 homogeneous materials sampled, a total of 7 homogenous materials were identified to contain asbestos above 1 percent by weight. The asbestos-containing homogeneous materials include:

- 4" pipe fittings on 5th floor (HA 1)
- 1" pipe fittings on 5th floor (HA 2)
- 2" pipe fittings in basement (HA 9)
- 4" pipe fittings in basement (HA 10)
- 1" pipe fittings in basement (HA 11)
- 2" pipe fittings in room 44 (HA 12)
- Red 9" x 9" floor tile (HA 13)

Homogeneous materials assumed to be ACM include:

- Fire doors
- 2" pipe insulation in room 44 (assumed ACM due to metal sheathing)

Homogeneous materials that are non-ACM include:

- 1' x 1' ceiling tile (HA 3)
- 9" x 9" gray floor tile (HA 4)
- Gray 4" cove base (HA 5)
- Red seamless floor covering (HA 6)
- Brown 3" cove base (HA 7)
- Maroon cove base (HA 8)
- Plaster (HA 14)

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 November 27, 2006, a State-of-Michigan Accredited Asbestos Building Inspector conducted an inspection for asbestos at the Music Practice Building, Building 21. The ACM's found as a result of this inspection were 1" pipe fittings, 2" pipe fittings, 4" pipe fittings, red 9" x 9" floor tile, 2" pipe insulation, and fire doors.



Mark R. Nelson
Building Inspector No. A33420



David W. Lutkenhoff, CIH, CIAQP

Table 1 - Description of Homogeneous Materials

Asbestos Inspection - Music Practice Building
Michigan State University, East Lansing, Michigan

| Material Description | Condition | Homogeneous Area No. | Asbestos Containing ? | Quantity | Unit |
|---|-----------|----------------------|-----------------------|----------|------|
| 4" pipe fittings | u | 1 | Y | 15 | l.f. |
| 1" pipe fittings | u | 2 | Y | 15 | l.f. |
| 1' x 1' ceiling tiles | u | 3 | N | 33,738 | s.f. |
| 9" x 9" gray floor tiles | u | 4 | N | 25,527 | s.f. |
| Gray 4" cove base | u | 5 | N | 8,229 | l.f. |
| Red seamless floor covering | sd | 6 | N | 2,000 | s.f. |
| Brown 3" cove base | u | 7 | N | 1,000 | l.f. |
| Maroon cove base | u | 8 | N | 20 | l.f. |
| Basement 2" fittings | u | 9 | Y | 10 | l.f. |
| Basement 4" fittings | u | 10 | Y | 26 | l.f. |
| Basement 1" fittings | u | 11 | Y | 10 | l.f. |
| 2" pipe fittings | u | 12 | Y | 5 | l.f. |
| Red 9" x 9" floor tile | u | 13 | Y | 40 | s.f. |
| Plaster | u | 14 | N | 55,060 | s.f. |
| 2" pipe insulation (under metal jacket) | u | 15 | Assumed | 80 | l.f. |
| Firedoors | u | 16 | Assumed | 17 | # |

Notes:

u = no damage observed

sd = slightly damaged

d = damaged

l.f. = linear feet

s.f. = square feet