

ASBESTOS BUILDING INSPECTION REPORT

for

Michigan State University
Office of Environmental and Occupational Safety
East Lansing, Michigan 48823

at

Erickson Hall
Building #144
East Lansing, Michigan 48823

Inspection conducted by

Fibertec Industrial Hygiene Services, Inc.
1914 Holloway Drive
Holt, Michigan 48842

Project #20704-1

Project dates: May 18– June 13, 2005

Final Report date: June 28, 2005

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INTRODUCTION

Fibertec Industrial Hygiene Services, Inc. (Fibertec IHS) was retained by the Michigan State University Office of Environmental and Occupational Safety to perform an asbestos building inspection in Erickson Hall. The project was discussed with Ms. Mary Lindsey-Frary of the Michigan State University, Office of Environmental and Occupational Safety prior to beginning the fieldwork. Ms. Lindsey-Frary requested a comprehensive asbestos building inspection, including the collection of an appropriate number of bulk asbestos samples in accordance with the provisions of the Asbestos in Construction Standard 29 CFR 1926.1101 (k)(2)(i).

The asbestos building inspection took place from May 18 through June 13, 2005. During the inspection, bulk samples were collected and quantities of suspect asbestos-containing materials were estimated.

CERTIFICATION

The asbestos building inspection was conducted by Adam Cobb and John Luna, State of Michigan Accredited Asbestos Building Inspectors. Mr. Luna and Mr. Cobb also maintain accreditation as Asbestos Contractor Supervisors.

Steve Day, John Walker and Sean Hillaker, all trained Polarized Light Microscopists, analyzed all bulk asbestos samples in the Fibertec IHS Polarized Light Microscopy (PLM) laboratory, which maintains current National Voluntary Laboratory Accreditation Program (NVLAP) accreditation (Lab Code 101510-0).

GENERAL INSPECTION PROCEDURES

In an effort to identify asbestos-containing material (ACM) at Erickson Hall, an extensive inspection procedure was followed. A visual inspection of the building was combined with the collection of an appropriate number and distribution of bulk samples. Material sampling that would potentially compromise the weather tight integrity of the building envelope was not conducted, (e.g., window and door frame compound, and roofing products/materials). The following rooms in Erickson Hall were not accessible during the inspection: 1, 2, 4, 5, 6, 8E, 11A, 11B, 11C, 12, 13B, 14, 15, 21 (A, B, C D), North elevator, 118E, 126, 130, 130A, 132, 217, 219, 229, 234, 318, 320, 321, 444 and 510.

Determination of suspect ACM was based on visual examination, bulk sample analysis and material age. Specifically, materials similar in color and texture were classified into homogenous areas (e.g., plaster). An appropriate number of samples were collected from material in each homogenous area. The samples were analyzed by Polarized Light Microscopy (PLM) in the Fibertec IHS PLM Laboratory. When the results of analysis of all samples from a homogenous area indicate no asbestos present (less than or equal to one percent), the homogenous area is considered to be a non-asbestos containing material. When the results of analysis indicate asbestos present (in a quantity greater than one percent) in just one sample of those collected from a single homogenous area, the material in the entire homogenous area must be considered asbestos-containing.

Destructive testing (*i.e.*, demolition) was not conducted as part of this asbestos building inspection. Quantities of ACM shown in pipe chases, above drywall ceilings or other inaccessible areas have been estimated. Additionally, some ACM hidden from view (e.g., pipe insulation in inaccessible pipe chases, between walls, floor leveling compound below floor tile, duct caulk on duct in mechanical shafts and vermiculite in cinderblock walls) may be present and may not have been accounted for as part of this inspection.

RESULTS OF VISUAL INSPECTION

Based on the inspection, 58 distinct suspect asbestos-containing materials were identified in Erickson Hall. Some suspect asbestos-containing materials were sampled a number of times in different locations, plaster, being an example. All suspect asbestos-containing materials observed at the time of the inspection are listed in the Room by Room Asbestos Building Inspection Forms.

BULK SAMPLE RESULTS

The information gathered from the inspection is included in Appendices C (Bulk Sample Log), D (Bulk Sample Analytical Report), E (Room by Room Asbestos Building Inspection Forms), F (Photograph Log), G (Floor Plan Sketches) and H (Significantly Damaged ACM).

SUMMARY OF ASBESTOS-CONTAINING MATERIALS

The following materials were found to contain asbestos in Erickson Hall:

- Drywall joint compound
- Steam/condensate supply and return pipe straight insulation
- Steam/condensate supply and return pipe joint and hanger insulation
- Domestic water supply and return pipe straight insulation
- Domestic water supply and return pipe joint and hanger insulation
- 9" x 9" dark brown floor tile with cream and rust streaks and associated mastic
- 9" x 9" green floor tile with cream streaks and associated mastic
- Mastic under 12" x 12" tan floor tile with white and rust streaks
- Mastic under 12" x 12" brown floor tile with cream and green streaks
- 4" red cove molding
- Red linoleum with white streaks
- Red vinyl stair tread with white streaks
- Hot water holding tank insulation
- Brown linoleum with cream, pink and black streaks
- 9" x 9" tan floor tile with cream and brown streaks and associated mastic
- Drain system pipe straight insulation
- Drain system pipe joint insulation
- 9" x 9" red floor tile with white streaks

The following materials were assumed to contain asbestos in Erickson Hall:

- Textured ceiling plaster
- Fire doors and frames
- Window and door frame caulk compound
- Roofing materials/products
- Chalkboards and associated glue pods
- Black laboratory sinks and table top

The following materials were found not to contain asbestos in Erickson Hall:

- Plaster (smooth)
- Drywall
- 2' x 2' white lay-in ceiling tile with pin holes and fissures
- 2' x 2' white drop-in ceiling tile with fissures
- 2' x 2' white drop-in ceiling tile with rough texture and fissures
- 2' x 4' white lay-in ceiling tile with pin holes and fissures
- 2' x 4' white drop-in ceiling tile with pin holes and fissures
- 2' x 2' white drop-in ceiling tile with pin holes and fissures
- 12" x 12" tan floor tile with white and rust streaks
- 12" x 12" brown floor tile with cream and green streaks

12" x 12" white ceiling tile with smooth pattern and associated glue pods
12" x 12" cream floor tile with gray and tan marble pattern and associated mastic
12" x 12" cream marble pattern floor tile and associated mastic
12" x 12" gray marble pattern floor tile and associated mastic
12" x 12" army green marble pattern floor tile and associated mastic
12" x 12" tan marble pattern floor tile and associated mastic
2' x 2' tan vinyl flooring with multicolored specks and associated mastic
Tan stair tread with multi-colored specks and associated mastic
Cream stair tread with tan specks and associated mastic
Cream vinyl flooring with tan specks and associated mastic
Maroon linoleum with flecks and associated mastic
4" black cove molding and associated mastic
4" brown cove molding and associated mastic
4" tan cove molding and associated mastic
4" green cove molding and associated mastic
4" army green cove molding and associated mastic
White sink undercoating
Cream linoleum with mosaic pattern and associated mastic
Ventilation duct expansion cloth
4" gray cove molding and associated mastic
12" x 12" white floor tile with gray streaks and associated mastic
12" x 12" beige floor tile with cream and green streaks and associated mastic
12" x 12" green marble pattern floor tile and associated mastic
Tan stair tread with cream and brown streaks and associated mastic
12" x 12" tan linoleum squares with cream and brown streaks and associated mastic
12" x 12" white ceiling tile with fissures and associated glue pods

CONCLUSION

Undamaged and damaged, non-friable (cannot be crumbled, pulverized or reduced to powder by hand pressure when dry) known or assumed asbestos-containing materials, as well as damaged and undamaged, friable known asbestos-containing materials, were discovered during the course of this inspection.

This facility inspection to determine the location of asbestos-containing materials was conducted in accordance with the provisions of the Asbestos in Construction Standard, the EPA Sampling Bulletin of September 30, 1994 and current industry standards.

RECOMMENDATIONS

Based on the information collected during this asbestos building inspection, the following recommendations are offered. These recommendations are based on currently observed conditions and may have to be adjusted if change of ownership, emergency, or other factors substantially alter the condition, use or planned future use of the building.

1. Notify the building occupants, custodians, Physical Plant personnel and others who may encounter ACM during the routine execution of their assigned work of the presence of known or assumed asbestos-containing products in or on the building. This notification must be given to any outside contractors (*e.g.*, HVAC maintenance personnel) who work within or atop the building and may disturb the asbestos-containing material(s). Depending on the specific activity being performed, maintenance or repair personnel may need to utilize personal protective equipment or other engineering controls and comply with the provisions of various asbestos regulations.
2. Provide 2-hour Asbestos Hazard Awareness Training including specific information regarding the quantity, condition and location of ACM for those individuals in the building who may encounter asbestos during the course of their work. Ensure that contractors performing work in the building have equivalent training (at a minimum) and provide appropriate documentation.

3. Plan for the proper removal of any asbestos-containing materials which may be impacted by renovation or demolition prior to any renovation or demolition within the facility.
4. Label any ACM identified in routine maintenance areas, mechanical rooms and custodial closets. Ceiling access hatches and access hatches should be labeled at a minimum, in accordance with 29 CFR 1910.1200(7)(vii).
5. Repair or remove areas of significantly damaged ACM. Ensure contractors performing the work are licensed, provide appropriate regulatory notification, and conduct appropriate air monitoring, including final clearance monitoring.

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