

# **ASBESTOS BUILDING INSPECTION REPORT**

for

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

at

North and South Kedzie Hall  
Building #29 and #32  
East Lansing, Michigan 48823

Inspection conducted by

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

Project #21306-1

Project dates: September 27 – October 6, 2005

Final Report date: November 8, 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 North and South Kedzie 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.

The asbestos building inspection took place from September 27 to October 7, 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 Gregg Kolodica, Adam Cobb and John Luna, State of Michigan Accredited Asbestos Building Inspectors. Mr. Cobb and Mr. Luna also maintain accreditation as Asbestos Contractor Supervisors.

Steven Day and Adam Mittino, trained Polarized Light Microscopists, analyzed all bulk asbestos samples in the Fibertec IHS Polarized Light Microscopy (PLM) laboratory.

GENERAL INSPECTION PROCEDURES

In an effort to identify asbestos-containing material (ACM) at North and South Kedzie 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 glazing compound, roofing) at the request of Michigan State University (including any outside sampling). The following rooms in North Kedzie Hall were not accessible during the inspection: B1, 100C, 103, 103A, 111, 112, 113, 117, 122, 123, 127, 128, 129, 130 and 334. The following rooms in South Kedzie Hall were not accessible during the inspection: B1, B1A, B2, 100, 100A, 101, 303A and 304.

Determination of suspect asbestos-containing material was based on visual examination, bulk sample analysis, material age and professional experience. Specifically, materials similar in color and texture were classified into homogenous areas (e.g., Smooth wall and ceiling 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 asbestos-containing material hidden from view (e.g., pipe insulation in inaccessible pipe chases or 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, 53 distinct suspect asbestos-containing materials were identified in North and South Kedzie Hall. Some suspect asbestos-containing materials were sampled a number of times in different locations, smooth white wall and ceiling 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 B (Bulk Sample Log), C (Bulk Sample Analytical Report), D (Room By Room Asbestos Building Inspection Forms), E (Photograph Log), F (Floor Plan Sketches and Sample Locations) and G (Significantly Damaged ACM).

## SUMMARY OF ASBESTOS-CONTAINING MATERIALS

The following materials were found to contain asbestos in North and South Kedzie Hall:

- 9" x 9" gray floor tile with cream and rust streaks
- Tan stair tread with cream, pink and black streaks
- 9" x 9" tan floor tile with swirl pattern
- Tan linoleum with brown and white specs
- Tan stair tread with brown and white streaks
- 9" x 9" blue floor tile with white and black streaks
- 9" x 9" green floor tile with white and green streaks
- Steam/condensate supply and return pipe straight insulation
- Tan linoleum with cream, pink and black streaks
- 9" x 9" tan floor tile with cream and rust streaks
- Steam/condensate supply and return pipe joint and hanger insulation
- Domestic water supply pipe joint and hanger insulation
- Hot water tank thermal systems insulation

The following materials were assumed to contain asbestos in North and South Kedzie Hall:

- Chalkboards and associated glue pods
- Black laboratory tables and sinks
- Fire doors and frames
- Window and door frame caulk compound
- Roofing products/materials
- Transite lab hood

The following materials were found not to contain asbestos in North and South Kedzie Hall:

- Smooth wall and ceiling plaster
- 2' x 4' white lay-in ceiling tile with pinholes
- 4" black cove molding and associated mastic
- 12" x 12" black floor tile with white streaks and associated mastic
- 6" brown cove molding and associated mastic
- 2' x 2' white lay-in ceiling tile with pin holes and fissures
- Green vinyl flooring with black and white specs and associated backing
- Green linoleum flooring with white streaks and associated backing
- 12" x 12" cream floor tile with marble pattern and associated mastic
- White sink undercoating
- 12" x 12" tan floor tile with small square pattern and associated backing
- 12" x 12" beige floor tile with tan and white streaks and associated mastic
- 12" x 12" cream floor tile with black and tan streaks and associated mastic
- 12" x 12" white spline ceiling tile with fissures and associated glue pods
- Fireboard (behind 12" x 12" white spline ceiling tile)

12" x 12" white floor tile with tan and gray marble pattern and associated mastic  
4" tan cove molding and associated mastic  
4" gray cove molding and associated mastic  
4" brown cove molding and associated mastic  
Drywall  
Drywall joint compound  
12" x 12" white floor tile with black specs and associated mastic  
12" x 12" dark green floor tile and associated mastic  
12" x 12" pink marble pattern floor tile and associated mastic  
12" x 12" light green floor tile and associated mastic  
12" x 12" blue marble pattern floor tile and associated mastic  
2' x 2' white lay-in ceiling tile with texture  
Ventilation duct expansion cloth  
2" x 12" tan multi-colored marble pattern floor tile and associated mastic  
Light green vinyl stair tread and associated mastic  
Gray sink undercoating  
4" green cove molding and associated mastic  
12" x 12" white splined ceiling tile with uniform holes  
Pink linoleum with mosaic pattern and associated backing

## 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, undamaged and damaged 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 two-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, custodial closets, and inside ceiling access hatches 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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