ASBESTOS BUILDING INSPECTION REPORT

for

Michigan State University
Office of Environmental Safety
East Lansing, Michigan 48824-1101

at

Michigan State University
Wills House Building #8
East Lansing, Michigan 48824

Investigation conducted by

Fibertec Industrial Hygiene Services, Inc.
1914 Holloway Drive
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Project #24991-1

Project Duration: February 25-26, 2008

Final Report Date: March 24, 2008

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INTRODUCTION

Fibertec Industrial Hygiene Services, Inc. (Fibertec IHS) was retained by Michigan State University to perform an inspection for asbestos containing materials at Michigan State University, Wills House, East Lansing, Michigan. The project was discussed with Mr. Zach Hansmann of the Michigan State University Office of Environmental Health and Safety prior to beginning the fieldwork. The inspection was designed to identify asbestos-containing materials within the building. The inspection was conducted pursuant to the inspection requirements of the Occupational Safety and Health Administration (OSHA), General Industry Standard for Asbestos, 29 CFR 1910.1001 and the Environmental Protection Agency (EPA) Asbestos Sampling Bulletin, dated September 30, 1994.

The asbestos building inspection took place on March 25-26, 2008. During the inspection, bulk samples of suspect asbestos-containing material (ACM) were collected. Collected asbestos bulk samples were submitted to the Fibertec IHS Polarized Light Microscopy (PLM) laboratory for analysis using EPA Method EPA/600/R-93/116.

CERTIFICATION

Mr. John Luna and Mr. Darrell DeMasters, State of Michigan accredited asbestos building inspectors, conducted the building inspection. Mr. Luna and Mr. DeMasters also maintain accreditation as Asbestos Contractor/Supervisors. A copy of their asbestos inspector credentials appear in Appendix A.

Trained polarized light microscopists analyzed all bulk asbestos samples in the Fibertec IHS Polarized Light Microscopy (PLM) laboratory. This laboratory maintains current National Voluntary Laboratory Accreditation Program (NVLAP) accreditation (Lab Code 101510-0). A copy of the Fibertec IHS NVLAP accreditation certificate appears in Appendix B.

GENERAL INSPECTION PROCEDURES

In an effort to identify asbestos-containing material (ACM) in all areas of the facility, an extensive inspection procedure was followed. A visual inspection of all rooms in Wills House was combined with the collection of an appropriate number and distribution of bulk samples. The visual inspection included all rooms of the building.

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 and distribution of samples were collected from material in each homogenous area. All samples were analyzed by polarized light microscopy. 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. As such, quantities of ACM believed to exist in inaccessible areas (like pipe insulation in wall cavities or above the plaster ceilings) have not been accounted for in this inspection. Additionally, some asbestos-containing material hidden from view may be present and may not have been accounted for as part of this inspection.

RESULTS OF VISUAL INSPECTION

Based on the inspection, 18 distinct suspect asbestos-containing materials were identified in the inspection of the Wills House, East Lansing, Michigan. Some suspect asbestos-containing materials were sampled a number of times in different locations, smooth 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. Information from lab analysis of collected samples is incorporated into the Room by Room Asbestos Building Inspection Forms to facilitate interpretation of the data.

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 (Damaged Asbestos-Containing Materials), G (Significantly Damaged Asbestos-Containing Materials), H (Floor Plan Drawing with Sample Locations) and I (Photograph Log). The lab analysis reports give a description of each sample, location where each was collected, and the results of analysis.

SUMMARY OF ASBESTOS-CONTAINING MATERIALS

The following materials were found to contain asbestos at Wills House:

Steam and condensate supply and return pipe straight insulation
Steam and condensate supply and return pipe joint and hanger insulation
Smooth wall and ceiling plaster
Dark brown glue pods
9” x 9” tan floor tile with cream and tan streaks and associated mastic
Brown linoleum with cream and black streaks
Domestic water supply pipe straight insulation
Domestic water supply pipe joint and hanger insulation

The following materials were assumed to contain asbestos at Wills House:

Ceramic tile bedding compound
Roofing materials and products
Window and door frame caulk compound

The following materials were found not to contain asbestos at Wills House:

Window glazing caulk compound
Dark green linoleum and associated backing
White textured ceiling plaster
2” x 2” white lay-in ceiling tile with pin holes and fissures
Drywall
4” black cove molding and associated mastic
12” x 12” white ceiling tile with fissures and associated glue pods

CONCLUSION

Non-friable (cannot be crumbled, pulverized or reduced to powder by hand pressure when dry) known or assumed asbestos-containing materials (*e.g.*, 9” x 9” tan floor tile) and friable (can be crumbled, pulverized or reduced to powder by hand pressure when dry) asbestos-containing materials (*e.g.*, domestic water thermal system insulation) were identified at Wills House.

RECOMMENDATIONS

Based on the information collected during this asbestos building inspection, the following recommendations are offered. These recommendations are based on plans to maintain the building in its current configuration and use and may have to be adjusted if change of ownership, emergency, or other factors alter the condition, use or planned use of the building.

Perform the following in this case:

1. Notify the owner, building maintenance staff, and contractors of the presence of ACM within the building. Ensure that contractors who work in the vicinity of or who may encounter asbestos-containing materials during the course of their work have successfully completed appropriate training. Ensure that contractors who work in the vicinity of or who may disturb asbestos-containing materials do so pursuant to the requirements of the Asbestos in Construction Standard, 29 CFR 1926.1101.

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 or on the building have equivalent training (at a minimum) and provide appropriate documentation.

3. Label ACM in routine maintenance areas, Mechanical Rooms and Custodial Closets, as required by 29 CFR 1910.1200(7)(vii).

4. Plan for the proper removal of any ACM that might be impacted by renovation or demolition prior to any renovation or demolition.

5. Repair or remove all damaged or significantly damaged asbestos-containing materials. All asbestos removal must be performed by a State of Michigan licensed asbestos abatement contractor. Ensure that contractors performing the work provide appropriate regulatory notification to the Michigan Department of Labor and Economic Growth (MDLEG) and the Michigan Department of Environmental Quality (MDEQ) and conduct appropriate air monitoring, including final clearance monitoring.

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Phillip A. Peterson
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