

ASBESTOS BUILDING INSPECTION REPORT

for

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

at the

Michigan State University
Beef Cattle Research Center
Building #471A
3200 Bennett Road
East Lansing, Michigan 48824

Inspection conducted by:

Fibertec Industrial Hygiene Services, Inc.
1914 Holloway Drive
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Project date: October 27, 2008

Final Report Date: November 14, 2008

Project #25987-1

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INTRODUCTION

Fibertec Industrial Hygiene Services, Inc. (Fibertec IHS) was retained by the Michigan State University, Office of Environmental Health and Safety to conduct an inspection for asbestos-containing materials at Building #471A at the Beef Cattle Research Center, 3200 Bennett Road, East Lansing, Michigan. The project was discussed with Mr. Zach Hansmann prior to beginning the fieldwork. The inspection included the collection of an appropriate number of bulk asbestos samples in accordance with the requirements of the Michigan Occupational Safety and Health Administration (MIOSHA) General Industry Standard for Asbestos, Part 305, Paragraph (j)(2)(i) and the Environmental Protection Agency (EPA) Asbestos Sampling Bulletin of September 30, 1994.

The building inspection took place on October 27, 2008.

CERTIFICATION

The building inspection was conducted by Mr. Jeff Suty, a State of Michigan Accredited Asbestos Building Inspector. Mr. Suty also maintains accreditation as an Asbestos Contractor/Supervisor. A copy of his inspector credential appears in Appendix A.

Trained Polarized Light Microscopists analyzed all bulk asbestos samples in the Fibertec IHS Polarized Light Microscopy (PLM) laboratory using EPA Method 600/R-93/116. The Fibertec IHS PLM laboratory maintains current National Voluntary Laboratory Accreditation Program (NVLAP) accreditation (Lab Code 101510-0). A copy of the Fibertec IHS NVLAP certificate of accreditation can be found in Appendix B.

GENERAL INSPECTION PROCEDURES

In an effort to identify asbestos-containing material (ACM) in all areas of the building, an extensive inspection procedure was followed. A visual inspection of all rooms in Building #471A was combined with the collection of an appropriate number and distribution of bulk asbestos samples.

Determination of suspect asbestos-containing material 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.*, drywall). 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, materials in pipe chases, mechanical shafts or above plaster ceilings have not been accounted for. Additionally, some asbestos-containing material hidden from view may be present and may not have been accounted for as part of this inspection (*e.g.* floor leveling compound beneath floor tile).

RESULTS OF VISUAL INSPECTION

Seventeen distinct suspect asbestos-containing materials were identified during the inspection of Building #471A. Some suspect asbestos-containing materials were sampled a number of times in different locations, drywall, 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 along with the estimated quantity of each material.

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) and F (Photograph Log).

SUMMARY OF ASBESTOS-CONTAINING MATERIALS

The following materials were found to contain asbestos at the Michigan State University Beef Cattle Research Center, Building #471A, East Lansing, Michigan:

- Domestic water supply pipe joint and hanger insulation
- Steam/Condensate pipe joint and hanger insulation
- Black sink undercoating
- 9" x 9" cream floor tile (associated mastic is not asbestos-containing)
- 9" x 9" green floor tile with white streaks (associated mastic is not asbestos-containing)
- Drywall joint compound
- Wallboard glue pods
- Tan sink undercoating

The following materials were assumed to contain asbestos at the Michigan State University Beef Cattle Research Center, Building #471A, East Lansing, Michigan:

- Fire door and frame
- Brown stair tread with white streaks and associated mastic

The following materials were found not to contain asbestos at the Michigan State Beef Cattle Research Center, Building #471A, East Lansing, Michigan:

- Domestic water supply pipe straight insulation (fiberglass) wrap
- Steam/Condensate pipe straight insulation (fiberglass) wrap
- Drywall
- 3" black cove molding and associated mastic
- 4" green cove molding and associated mastic
- 4" tan cove molding and associated mastic
- White sink undercoating

CONCLUSIONS

Based on the findings of the inspection and the results of the sample analysis, the following conclusions were drawn:

Undamaged, damaged and significantly damaged, friable (can be crumbled, pulverized or reduced to powder by hand pressure when dry) asbestos-containing materials were identified at the Building #471A. Additionally, undamaged and damaged, non-friable (cannot be crumbled, pulverized or reduced to powder by hand pressure when dry) asbestos-containing materials were also identified. Finally, an undamaged, non-friable assumed asbestos-containing material was also identified during the inspection.

RECOMMENDATIONS

Based on the information collected during the visual inspection and the bulk sample analytical results, the following recommendations for the Michigan State University Beef Cattle Research Center, Building #471A are offered. These recommendations may have to be adjusted if change of ownership, emergency, or other factors alter the condition, use or planned use of the building.

1. Notify all personnel who may encounter ACM or potentially hazardous materials during the routine execution of their assigned work of the presence of those materials. This notification must be given to any outside contractors (*e.g.*, renovation contractor) who work within 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 and annual refresher 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 that they provide appropriate documentation of said training having occurred within the last year.
3. Retain a State of Michigan licensed asbestos removal contractor to remove and dispose of the damaged/ significantly damaged asbestos-containing domestic water pipe joint and hanger and steam/condensate pipe joint and hanger. A total of approximately eight damaged/significantly damaged asbestos-containing pipe joints/hangers were identified during the inspection. Also, have the contractor remove the approximately 4 square feet of damaged 9" x 9" cream floor tile in Room 201C.
4. Label ACM in routine maintenance areas as required by the Michigan Hazard Communication and Asbestos General Industry Standards.
5. Prior to any future renovation in areas that may have hidden ACM (i.e., behind walls) have the area inspected by accredited personnel and a sample collected and analyzed by an accredited laboratory.

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