ASBESTOS AND LIMITED LEAD BUILDING INSPECTION REPORT

for

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

at the

Department of Police and Public Safety Building #87 East Lansing, Michigan 48823

Inspection conducted by

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

Project #20370-1

Project dates: March 8 - 10, 2005

Final Report date: March 28, 2005

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INTRODUCTION

Fibertec Industrial Hygiene Services, Inc. (Fibertec IHS) was retained by the Michigan State University Office of Environmental Safety to perform an asbestos building inspection and limited paint inspection in the Department of Police and Public Safety Building. 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 and limited lead paint building inspection, including the collection of an appropriate number of bulk asbestos samples in accordance with the provisions of the Asbestos in Construction Standard and a limited number of paint samples in accordance with the provisions of the American Society for Testing and Materials (ASTM) Standard E1729-99.

The asbestos and limited lead building inspection took place from March 8 through March 10, 2005. During the inspection, bulk samples were collected and quantities of suspect asbestos-containing materials were estimated. A limited number of paint samples were also collected.

CERTIFICATION

The asbestos and limited lead paint building inspection was conducted by John Luna, a State of Michigan Accredited Asbestos Building Inspectors. Mr. Luna also maintains accreditation as an Asbestos Contractor Supervisor.

John Walker, a trained Polarized Light Microscopist, 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).

Jeri Haney, a trained Laboratory Chemist, analyzed all lead paint samples. All samples were analyzed in the Fibertec, Inc. Analytical Laboratory, which maintains current National Environmental Laboratory Accreditation Program (NELAP) accreditation (Lab Code 100312).

GENERAL INSPECTION PROCEDURES

In an effort to identify asbestos-containing material (ACM) and lead-containing paint at the Department of Police and Public Safety Building, Building #87, 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 asbestos samples. Material sampling that would potentially compromise the weather tight integrity of the building envelope was not conducted (e.g., window glazing compound, roofing). The following rooms in the Department of Police and Public Safety Building, Building #87, were not accessible during the inspection: 100B, 109, 126, W137, and W139.

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., drywall). 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.

Determination of lead paint was based on visual examination and bulk sample analysis. Specifically, a sample of each observed major paint color was collected pursuant to the requirements of ASTM Standard E1729-99 Standard Practice for Field Collection of Dried Paint Samples. All samples were submitted to the Fibertec, Inc. Analytical Laboratory for analysis. When results indicated lead levels above 0.5 weight percent, the paint was considered lead-based. When the results indicated lead present below 0.5 weight percent and above the detected limit, the paint was considered lead-containing. When results indicated lead present at or below the method detection limit, the paint was considered non lead-containing.

RESULTS OF VISUAL INSPECTION

Based on the inspection, 24 distinct suspect asbestos-containing materials were identified in the Department of Police and Public Safety Building, Building #87. 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.

Based on the inspection, two major paint colors were identified in the Department of Police and Public Safety, Building #87 mechanical rooms. Each major paint color was sampled once from a representative substrate for the specific color. All suspect lead paints observed at the time of the inspection are listed in the Paint Sample Log.

BULK SAMPLE RESULTS

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

SUMMARY OF ASBESTOS-CONTAINING MATERIALS AND PAINT

No materials were found to contain asbestos in the Department of Police and Public Safety Building, Building #87.

The following materials were assumed to contain asbestos in the Department of Police and Public Safety Building, Building #87:

Interior brown window frame caulk compound Brown window glaze compound Fire doors and frames Transite panel fume hood Brown window and door frame caulk compound Gray exterior building caulk compound Roofing materials

The following materials were found not to contain asbestos in the Department of Police and Public Safety Building, Building #87:

Steam and condensate pipe joint and hanger insulation
Domestic water pipe joint and hanger insulation
Ventilation duct expansion cloth material
Gray sink undercoating
3" x 6" black floor tile
2' x 2' white lay-in ceiling tile with pin holes and fissures
2' x 4' white drop-in ceiling tile with rough texture
Drywall
Drywall joint compound

2' x 2' brown linoleum squares with cream and black specks and associated mastic

12" x 12" tan floor tile with small square pattern with self-adhesive

2' x 4' white lay-in ceiling tile with pinholes and fissures

12" x 12" light cream floor tile with marble pattern and associated mastic

12" x 12" peach floor tile with black specks and associated mastic

Roof drain pipe joint insulation

4" pink cove molding and associated mastic

4" brown cove molding and associated mastic

4" black cove molding and associated mastic

The following paints were found to be lead-containing in the Department of Police and Public Safety Building, Building #87:

White structural steel, pipe and ventilation fan duct paint Maroon structural steel paint

No paints were found to be lead-based in the Department of Police and Public Safety Building, Building #87.

No paints were found to be non lead-containing in the Department of Police and Public Safety Building, Building #87.

CONCLUSION

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

No paint was discovered to be lead-based pursuant to the Housing and Urban development (HUD, 0.5%) and both (two) paints were found to be lead-containing.

This facility inspection to determine the location of asbestos-containing materials and limited lead paint was conducted in accordance with the provisions of the Asbestos in Construction Standard (and the EPA Sampling Bulletin of September 30, 1994), and current industry standards, as well as the ASTM Standard E1729-99 Standard Practice for Field Collection of Dried Paint Samples.

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 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) or lead paints. 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 and lead standards.
- 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 assumed asbestos-containing materials which may be impacted by renovation or demolition prior to any renovation or demolition within the facility. Depending on the magnitude and complexity of the work to be performed, specifications may need to be developed to guide the contractor through the remediation process. Air monitoring during the work may also be required.

- 4. Label any assumed ACM identified in routine maintenance areas, mechanical rooms, and custodial closets Access hatches should be labeled at a minimum, in accordance with 29 CFR 1910.1200(7)(vii).
- 5. No damaged assumed ACM was discovered during this inspection. However, repair or remove areas of assumed ACM which may become damaged in the future. Ensure contractors performing the work are licensed, provide appropriate regulatory notification, and conduct appropriate air monitoring, including final clearance monitoring.

John Luna

Michigan Accredited Asbestos Inspector Card #A4665

Phillip A. Peterson

Vice President