

# Michigan State University East Lansing, Michigan

## Landon Hall Asbestos Inspection

July 21, 2004  
Project No. G04277

**ftc&h**  
fishbeck, thompson, carr & huber  
engineers • scientists • architects



**LANDON HALL  
ASBESTOS INSPECTION**

**PREPARED FOR:  
MICHIGAN STATE UNIVERSITY  
EAST LANSING, MICHIGAN**

**JULY 21, 2004  
PROJECT NO. G04277**

## TABLE OF CONTENTS

Introduction ..... 1  
 Building Description ..... 1  
 Sampling Methodology ..... 1  
 Results ..... 2  
 Summary ..... 2

## LIST OF TABLES

Table 1      Sample Sites  
 Table 2      Asbestos-Containing Homogeneous Materials  
 Table 3      Non-Asbestos-Containing Homogeneous Materials  
 Table 4      Room-By-Room Identification of Asbestos-Containing Materials

## LIST OF APPENDICES

Appendix 1      Previous Sampling Results (Provided by Michigan State University)  
 Appendix 2      Floor Plans  
 Appendix 3      Analytical Data Report

## **INTRODUCTION**

Fishbeck, Thompson, Carr & Huber, Inc. (FTC&H) was retained by Michigan State University (MSU) to conduct an asbestos building inspection of Landon Hall. FTC&H was assisted by Environmental Health Resources, Inc. (EHR). Mr. Jeremiah Salmon (A16810) from EHR, who is a State of Michigan accredited asbestos inspector, and Mr. Eric Dickinson from FTC&H conducted the inspection on May 26 and 27, 2004.

## **BUILDING DESCRIPTION**

Landon Hall is a four-story building of brick and poured concrete construction. Interior partitions are constructed of drywall, troweled-on plaster, smooth plaster, and block walls. Ceilings are either concrete, drop-in ceiling tiles, glued-on ceiling tiles, troweled-on plaster, smooth plaster, or sprayed-on surfacing. Floors are finished with either concrete, carpet over concrete, vinyl floor tile, carpet over floor tile, resilient flooring, or carpet over resilient flooring.

## **SAMPLING METHODOLOGY**

MSU provided a summary of previous asbestos sampling results from Landon Hall (Appendix 1). The previous results were reviewed and incorporated into the inspection where warranted. A pre-sampling survey was conducted to identify homogeneous materials of construction. The survey was a functional space (room-by-room) survey and was used to design the sampling plan. For homogeneous materials not identified or verified from the previous sampling, a minimum of one sample was collected from miscellaneous materials; three to seven samples were collected from surfacing materials; and thermal systems were sampled as necessary. Obvious asbestos containing materials (ACMs), such as transite, aircell, or other labeled materials, were not sampled.

All samples were collected by a State of Michigan accredited building inspector. The samples were collected from areas considered representative of each homogeneous material. Destructive sampling was not conducted and the samples were collected from accessible materials. Non-permanent labels were used to mark the sampling sites. Sampling locations were repaired, where necessary.

As required by MSU, the survey was limited to the building interior. Samples were not collected from roofing materials or exterior materials. In addition, samples were not collected from operating machinery or fire doors. Confined spaces and tunnels were not entered, however, the spaces were viewed from the doorways or openings.

Thirty nine distinct homogeneous materials suspected of containing asbestos were identified during the survey. One of the homogeneous materials was identified during the previous asbestos sampling and verified during this survey. This material was not sampled due to the sampling history provided by MSU. A total of fifty-five bulk material samples were collected from the homogenous materials for asbestos analysis. Bulk material samples were collected from suspect ACMs according to the protocol described in 29 CFR 1926.1101 (OSHA Asbestos Construction Standard). Sample locations are described in Table 1 – Sample Sites and located on the floor plans included as Appendix 2.

The samples were transported to EMSL Analytical Laboratories (EMSL) in Ann Arbor, Michigan for bulk asbestos analysis. The analytical data report provided by EMSL is included as Appendix 3.

## RESULTS

Of the thirty-nine homogeneous materials present, a total of nine homogeneous materials were identified to contain asbestos above one percent by weight. The asbestos containing homogeneous materials are described on Table 2 – Asbestos-Containing Homogeneous Materials. Non-asbestos-containing homogeneous materials are described on Table 3 – Non-Asbestos-Containing Homogeneous Materials.

The asbestos containing homogeneous materials present in Landon Hall are summarized by functional space on Table 4 – Room-By-Room Identification of Asbestos-Containing Materials. Table 4 contains a listing of each functional space, the ACM identified within the functional space, and approximate ACM quantities. The quantities of ACMs provided within this report are only estimates. Additional materials may exist within wall cavities, ceiling cavities, or other inaccessible areas that could not be evaluated as part of this survey.

## SUMMARY

The following is a list of suspect materials that were not tested and are assumed to be positive: Roofing materials, fire doors, air cell pipe insulation, and insulating board in heating vents.

Some areas where ACMs were observed or suspected to be present were not quantified due to limited access and absence of mechanical drawings. The following rooms were inaccessible: G6, G40, G40A, G40B, 114B, 114C, 114D, 136, 136A, 136B, 136C, and 136D.

Asbestos-containing pipe and pipe fitting insulation is present throughout the building. The original pipe and pipe fitting insulation present on all types of piping is ACM, including air cell, millboard, woolfelt, and mag. Limited areas of piping insulation have been replaced by fiberglass. The majority of pipe fitting insulation observed appears to be the original ACM.

Some areas of 9" x 9" and 12" x 12" vinyl tile are ACM.

ACM spray-on surfacing was present in room 224.

Vibration dampening cloth was observed on some mechanical equipment.

No significantly damaged ACM was observed.



Steven M. Kimm, CPG  
Fishbeck, Thompson, Carr & Huber, Inc.



Jeremiah Salmon  
Environmental Health Resources, Inc.