

January 9, 2006  
File No. 05-1350.14

Hope College  
178 East 11<sup>th</sup> Street  
Holland, MI 49423

Attn: Jerry Gunnink  
  
Subject: Report of Findings  
Asbestos Inspection  
Lubbers Hall

### ***Introduction***

Lubbers Hall was inspected at the request of Mr. Jerry Gunnink of Hope College, Holland, Michigan. The inspection for asbestos containing materials (ACMs) was conducted on December 20, 2005. This report documents the type, location, and quantity of asbestos containing building material (ACBM) identified during the inspection. The inspection was conducted by a State-of-Michigan accredited inspector, Andrew Smith, accreditation number A10545.

### ***Site Description***

Lubbers Hall is a four-story classroom and office building on the campus of Hope College in Holland, Michigan. The basement consisted of storage and mechanical rooms along with an extensive tunnel system for mechanical systems. Floors one through three are a mixture of offices and classrooms. The fourth floor included HVAC rooms and some office spaces. The perimeter of the fourth floor contained stored materials. Lubbers Hall has had several renovations since the building's initial construction.

### ***Bulk Samples***

#### **Asbestos**

Twenty-six (26) bulk material samples were collected from eighteen (18) homogeneous materials resulting in thirty-six (36) different sample analyses (including layers) suspected of containing asbestos. The results are summarized below in Table 1.

**Table 1**  
**Material Type, Sample Location, & Sample Number**  
**Analytical Results**

HM#	Material Description	Sample Number	Sample Location	Analytical Results
#1	Aircell pipe insulation	1-1	Basement mechanical room	Chrysotile 65%
#2	Fitting insulation on fiberglass insulated piping	2-1	Tunnel system B-1	ND
		2-2	First floor men's restroom	ND
		2-3	Room 216	ND
#3	Mud fitting insulation, main steam line	3-1	SE section of tunnel system	Chrysotile 30%
#4	2' x 4' ceiling tile	4-1	Room 107	ND
#5	12" x 12" floor tile, salmon with brown and orange	5-1	First floor hallway	ND
#6	Gray covebase	6-1	Room 107	ND
#7	Brown covebase	7-1	First floor hallway	ND
#8	Window sill	8-1	Room 107	ND
#9	Wall plaster/mortar	9-1	Room 104	ND/All layers
		9-2	First floor woman's restroom	ND/All layers
		9-3	Second floor west end lobby	ND/All layers
		9-4	Room 201	ND/All layers
		9-5	Room 321	ND/All layers
		9-6	Room 402	ND/All layers
		9-7	Room 401	ND/All layers
#10	Black covebase	10-1	Room 109A	ND
#11	Window putty	11-1	Room 203	ND
#12	2' x 2' ceiling tile	12-1	Room 220	ND
#13	Drywall & joint compound	13-1	Room 220	ND
#14	Glue pods	14-1	By room 321 west wing	ND
#15	Expansion cloth	15-1	Room 402	Chrysotile 30%
#16	9" x 9" floor tile brown with cream streaks	16-1	Room 406	Chrysotile 3% (tile) Mastic ND
#17	Wall board glue pod	17-1	Room 404	ND
#18	2' x 4' ceiling tile 2' x 2' pattern	18-1	Room 401	ND

Four (4) samples were found to contain asbestos in excess of 1% by weight. Laboratory results can be found in Appendix A.

Confirmed ACBMs are listed in Table 2 below with the location and estimated quantity of each material observed during the inspection and sample.

**Table 2**  
**Asbestos Containing Building Materials**

HA#	Material	Location	Estimated Quantity
#1	Aircell pipe insulation	Basement/basement mechanical room	1, 720 l.f.
#3	Mud fitting main steam line	Basement, SE section	2 fittings
#15	Expansion Cloth	4 <sup>th</sup> floor, room 402	10 sq. ft.
#16	9"x9" floor tile brown with cream streaks	Room 406	400 sq. ft.

Material found to contain asbestos included two types of thermal system insulation and two miscellaneous materials. Asbestos containing miscellaneous material included a 9" x 9" floor tile and white vibration dampening cloth. The asbestos containing thermal system insulation is located in an area that is not routinely used, is in fair condition, and poses a minimal health risk to building occupants. Caution should be used when performing any work in the basement and tunnel system to ensure that the thermal system insulation is not disturbed. The expansion cloth used as a vibration damper on the forth floor HVAC system is also in good shape, but should be periodically inspected to ensure that it has not begun to deteriorate. Asbestos containing floor tile in the forth floor storage area is showing signs of deterioration, but is still in a non-friable state.

Materials not sampled during this inspection include roofing, flashing, and fire doors. Materials not listed as sampled or listed as not sampled are assumed to contain asbestos and should be tested before being disturbed, or be treated as asbestos containing.

EHR appreciates the opportunity to provide this service to Hope College. If you have any questions, please feel free to contact either of the undersigned at (616) 735-1515.

Sincerely,

**Environmental Health Resources, Inc.**

---

Andrew D. Smith  
Inspector

---

David W. Lutkenhoff, CIH  
Principal

## ***APPENDIX A***

---

### ***Sample Results***

# HOPE COLLEGE

---

## *Asbestos Inspection Lubbers Hall*

### *Prepared for:*

Hope College  
178 East 11<sup>th</sup> Street  
Holland, Michigan 49423

### *Prepared by:*

Environmental Health Resources, Inc.  
2930 3 Mile Road, NW  
Grand Rapids, Michigan 49534

EHR File No. 05-1350.14  
January 9, 2006

Copyright© 2006 Environmental Health Resources, Inc.