

June 16, 1994

REPORT: Full Building Survey

TO: Linda McCracken-Hunt, Project Development, 100 Shops Building
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FROM: John Allen, Asbestos Group, Environmental Health and Safety, B-7 U-Tech Building,
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SUBJECT: Asbestos Material Survey - Wesbrook Hall
EH&S Project No: 010-94-052
Client Project No: For Data Base

Scope of Work: A full building asbestos material survey was conducted on May 9 through May 27, 1994. The purpose of the survey was to identify asbestos-containing materials (ACM) as defined by the Environmental Protection Agency (EPA). Any material that is greater than 1% asbestos is considered to be ACM. The intent of the survey was to identify both friable and nonfriable suspect ACM, identify nonfriable ACM that may become friable under demolition or renovation conditions, and to provide approximate cost estimates for the removal of identified ACM prior to renovation of Wesbrook Hall.

Project Description: Bulk samples of suspect ACM were collected on-site and analyzed via polarized light microscopy (PLM) for asbestos content. Results of analyses are listed in Appendix I of this report. Appendix I is formatted to provide a room by room inventory of suspect ACM, the asbestos content of each material listed, and friability. An explanation of the tables and abbreviations used in the tables is included with Appendix I. Appendix II is a room by room listing of only those suspect materials that tested >1% asbestos. Minnesota Department of Health (MDH) Asbestos Rules regulate only friable ACM (material may be reduced to powder or dust under hand pressure) while the EPA regulates ACM that may become friable under demolition or renovation conditions.

The following friable or potentially friable materials tested positive as ACM:

- <4" white fibrous pipe insulation and associated pipe fitting insulation
- <4" felt with tar insulation and associated pipe fitting insulation
- <4" fibrous pipe fitting insulation on fiberglass
- 4"-8" white fibrous pipe insulation and associated pipe fitting insulation
- 2'x2' ceiling tile, pinhole crater
- 2'x2' ceiling tile, pinhole crater/fissured
- 9"x9" floor tile, grey with black and tan
- 9"x9" floor tile, olive with cream and black
- 9"x9" floor tile, light grey with white
- 9"x9" floor tile, beige with brown and tan
- 9"x9" floor tile, red and black
- 9"x9" floor tile, olive with cream and charcoal
- 9"x9" floor tile, cream with tan
- 12"x12" floor tile, olive with black and white
- 12"x12" floor tile, black with white
- 12"x12" floor tile, beige
- 12"x12" floor tile, white with beige
- 12"x12" floor tile, beige with brown and tan
- 12"x12" floor tile, beige with tan and white

The following suspect materials tested none detected (ND) as ACM:

- ceiling plaster
- wall plaster
- 12"x12" ceiling tile, pegboard
- 12"x12" ceiling tile, concentric hole
- 1'x2' ceiling tile, pegboard
- 2'x2' ceiling tile, pinhole fissured
- 2'x2' ceiling tile, pinhole
- 2'x2' ceiling tile, pinhole deep crater
- 2'x2' ceiling tile, pinhole mini-fissured
- 2'x2' ceiling tile, nail hole mini-fissured
- 2'x4' ceiling tile, pinhole fissured
- 2'x4' wall tile, pegboard
- 9"x9" floor tile, olive with black and tan
- 9"x9" floor tile, grey with cream and black
- 12"x12" floor tile, charcoal and grey
- 12"x12" floor tile, beige with brown and cream
- 12"x12" floor tile, cream multi-color
- 12"x12" floor tile, charcoal molting
- 12"x12" floor tile, grey with black and cream
- 12"x12" floor tile, beige with brown and white
- 12"x12" floor tile, grey with charcoal and tan
- 12"x12" floor tile, white with tan
- brown linoleum
- black and white linoleum
- sheetrock and taping compound
- baseboard adhesive, brown
- concrete block mortar
- red brick mortar
- red clay tile mortar
- tar paper
- mineral wool batting
- canvass vibration joints
- ceiling tile adhesive

The following nonfriable with low potential to become friable materials tested positive as ACM:

- **floor tile adhesive**

The following material tested less than 1% asbestos:

- spray-on fireproofing

For room locations of above noted materials, refer to Appendices.

Observations and Recommendations:

1. Department of Environmental Health & Safety (DEHS);
Please refer to condition assessments for specific damaged areas. In general, materials were found to be in good to excellent shape and do not pose significant health concerns to the building occupants.
2. Facilities Management;
In some rooms throughout the building, carpeting is covering the asbestos containing floor tile. This should be noted in case the carpeting is removed during any proposed renovation project. If the floor tile comes up with the carpet, the carpet should then be removed by the Facilities Management Asbestos Abatement Unit.

Asbestos containing ceiling tiles were found in the following areas: Rooms 10, 16, 16A, 45, 65, 69, 69A, 208, 210 and the West Stairs. Proper Operation & Maintenance (O&M) procedures should be followed whenever working on or above these ceiling tiles.

3. General;

In Room 150B, an asbestos containing white fibrous pipe was discovered behind the wood paneling. Because the panels could not be removed without causing damage, the areas behind the paneling were not visible. It is possible that additional ACM is present behind the wood panels in Rooms 150A-D, and precautions should be taken if these panels are disturbed.

The floor hatches found in the Basement Hallway were not accessible at the time of the survey.

Due to limited access points in the plaster ceilings and walls, some pipe chases were completely inaccessible or only slightly visible. As a result, the quantities listed reflect the visibility available at the time of the survey.

Although no roof sampling was done, complete roof sampling is recommended at a time when a qualified roofing contractor is on-site to patch core sample holes in roofing.

Rooms 61, 63, 301.5, and 301 were inaccessible at the time of the survey.

Cost Information: The approximate cost for the removal of all ACM is itemized below. These figures are based on the assumption that all friable and potentially friable ACM are going to be removed. For project specific removal costs, contact this office with your project requirements and unit costs can be calculated for the impacted areas.

<u>MATERIAL TYPE</u>	<u>LOW RANGE</u>	<u>HIGH RANGE</u>
• thermal system insulation	\$66,103	\$86,000
• floor tile & adhesive	29,206	58,412
• ceiling tile	4,497	8,994
TOTAL	\$99,806	\$153,406

All ACM removal must be performed by a Minnesota licensed asbestos abatement contractor. All asbestos removal shall be performed within the specified procedures as outlined in the University of Minnesota Technical Specification for Asbestos Abatement. Please note that removal costs are highly variable and dependent on such factors as contractor availability, accessibility of work areas and site specific work plans.

Air monitoring is required for many asbestos-related projects. Environmental Health and Safety (EH&S) is available to provide this service. The estimated cost for EH&S to complete air monitoring requirements for specific projects will be made available upon request. The cost of air monitoring is a function of contractor on-site days and may vary dependent upon project specific scope of work. EH&S will provide labor, equipment and project oversight as necessary. Project management and contract administration will be provided by the Facilities Management Project Development Group.

EH&S also recommends that throughout the general renovation activities associated with this building, precautions and work practices should be implemented to minimize nuisance dust levels. Dust suppression techniques (misting the air with water and keeping materials wet) should be required of the general contractor.

If there is any further information required, or other questions arise regarding this request, please contact John Allen at 627-4861.

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