# University of Toronto

OFFICE OF THE VICE-PRESIDENT, HUMAN RESOURCES

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| TO: | Business Board |
| SPONSOR: | Professor Angela Hildyard<br>Vice-President, Human Resources |
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| DATE: | June 12, 2003 for June 19, 2003 |
| AGENDA ITEM: | 7 |

**ITEM IDENTIFICATION:**

**Asbestos Control Policy**

**JURISDICTIONAL INFORMATION:**

Pursuant to Section 5.12 of the Terms of Reference, the Business Board recommends to Governing Council for approval, policies on health and safety matters.

**PREVIOUS ACTION TAKEN:**

Although the University has had an Asbestos Control Program in place for some time, this is the first time a Policy per se has been brought to Business Board for approval.

**HIGHLIGHTS:**

In March 2002, as a result of the concerns of employees with respect to the University's Asbestos Control Program, the Vice-President Human Resources established a Joint Task Force, with the following terms of reference:

(i) Review the asbestos control program and procedures, including the inventory of asbestos containing materials in University properties, vis-a vis current legal requirements.

(ii) Investigate best practice in comparable institutions and in the private sector

(iii) In light of (i) and (ii) above, recommend revisions to the current program and procedures, including a schedule for the timely review of the program

(iv) Recommend procedures and processes for ensuring compliance with the asbestos control program by University staff and by external contractors, including the use of personal protective equipment

(v) Review current training programs and make recommendations for improvement, as required.

Although the original goal was to complete this task by June 30, 2002, the complexities of the issues and the desire to reach consensus on as many issues as possible, resulted in a far longer consultation process.

The Task Force recommends that the University establish an **Asbestos Control Policy**, to be approved by Business Board, accompanied by an **Asbestos Control Program**.

The **Policy** sets out the University's commitment towards proper asbestos management practices.

Key features of the Asbestos Control **Program** include

The establishment of an Asbestos Advisory Committee, reporting to the Vice-President, Human Resources.
Increased involvement of JH&SC's in asbestos related activities and issues.
Review of the Program every two years.
Increased requirements for external contractors.
Establishment of an asbestos medical surveillance program to be made available to University employees who work with asbestos.
Improved training.
Consideration of proactive removal of asbestos during major renovation.
Development of two new positions within Facilities and Services (Manager, Environmental Hazards and Safety; Asbestos Coordinator, Capital Projects).

**FINANCIAL AND/OR PLANNING IMPLICATIONS:**

The two proposed positions are built into the existing budgets in F&S; Asbestos containment and/or removal costs will be built into the Deferred Maintenance budget and/or Capital Renovation budgets as appropriate.

**RECOMMENDATION:**

It is recommended to the Business Board

THAT the Business Board recommend approval of the Asbestos Control Policy.

# University of Toronto
# ASBESTOS CONTROL POLICY

## Preamble

The University of Toronto is committed to promoting the health, safety and well-being of its employees, students, visitors and contractors.

Asbestos, a fibrous material commonly used in building materials prior to 1980 because of its heat-resistant, chemical-resistant and insulative properties, continues to be present in a number of University buildings, in the form of sprayed fireproofing, insulation around piping and mechanical equipment, thermal and acoustic boards, plasters, asbestos cement products, and floor and ceiling tiles. Serious health problems, such as asbestosis, lung cancer, and mesothelioma, are associated with inhalation of harmful levels of asbestos fibres.

## Mandate

Recognizing the hazards that may arise when asbestos fibres become airborne as a result of disturbance or deterioration, the University is committed to the strict management of all asbestos-containing materials in University buildings, and any activities which may disturb such materials. The University has the responsibility to ensure that stringent controls are in place to prevent the potential exposure of individuals to harmful levels of asbestos.

## Scope

This Policy applies to all buildings and structures owned by the University of Toronto, to all employees and students of the University, to occupants of University buildings, and to external organizations who may come in contact with or disturb asbestos-containing materials in University buildings.

## Objectives

The University is committed to achieving the following objectives:

- To exercise due diligence in protecting University employees from the potential health risks associated with hazardous exposure to airborne asbestos fibres;
- To provide a safe and healthy work and study environment for employees, students, contractors and visitors, in accordance with the University's Health and Safety Policy;
- To comply with the legislated requirements outlined under the *Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations (O.Reg. 838, RRO 1990 (as amended))*, made under the *Occupational Health and Safety Act of Ontario*;
- To comply with this Policy and the University's Asbestos Control Program.

The eventual removal of all friable asbestos-containing materials from University buildings is a long-term objective. In the mean time, the University will manage all asbestos hazards based on prioritization and an assessment of risk. Priority for asbestos removal will be assigned as follows:

- All friable asbestos-containing materials will be removed prior to any demolition activity which may result in their disturbance.
- Friable asbestos-containing materials which have been damaged to the extent that repair measures are not expected to effectively maintain the material in good condition are to be removed.
- Consideration must be given to the proactive removal of friable asbestos-containing materials during major renovation projects, or during any major asbestos removal work.

## Implementation

Under the authority of the Asbestos Control Policy:

- The University will establish an Asbestos Control Program which will outline a comprehensive system to actively manage and stringently control all asbestos-containing materials in University buildings, and all activities which may disturb such materials, including maintenance, alteration, and repair operations.
- The Program will clearly define and communicate the responsibilities of all workplace parties involved in its development, administration and implementation.
- In keeping with the University's Health and Safety Policy, individuals who fail to meet their obligations as outlined in the Program, may, depending on the circumstances, face appropriate discipline or sanctions.
- The Program may be amended from time to time by University administration in consultation with appropriate union representatives, provided it remains consistent with the Policy.
- The Vice-President, Human Resources, will report on asbestos-related issues to the Business Board, pursuant to the Business Board Terms of Reference.

JUNE 2003

# ASBESTOS CONTROL PROGRAM

University of Toronto

**June 2003**

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# APPROVALS

*The University of Toronto Asbestos Control Program is contained in this document. The program was developed in accordance with the University Health & Safety Policy and the Asbestos Control Policy, to ensure compliance with the Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations made under the Occupational Health and Safety Act of Ontario. We the undersigned understand the provisions of this program and acknowledge our responsibilities as outlined in Section 3 of this document.*

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# 1.0 INTRODUCTION

Asbestos is a fibrous material used in many University building materials in the past because of its characteristics of strength, heat resistance and chemical resistance. Hazardous exposures to asbestos can result in serious health problems. Proper control measures must be in place to prevent the disturbance of asbestos-containing materials and to prevent potential exposure to harmful levels of airborne asbestos by the University community.

## Program Objectives:

The Asbestos Control Program, written under the authority of the University's Asbestos Control Policy, establishes a comprehensive system to actively manage and stringently control all asbestos-containing materials in University buildings, and all activities which may disturb such materials, including maintenance, alteration, and repair operations.

The objectives of the Program are:

(1) to exercise due diligence in protecting University employees from the potential health risks associated with hazardous exposure to airborne asbestos fibres;

(2) to provide a safe and healthy work and study environment for employees, students, contractors and visitors, in accordance with the University's Health and Safety Policy;

(3) to comply with the legislated requirements outlined under the *Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations (O.Reg. 838, RRO 1990 (as amended))*, made under the *Occupational Health and Safety Act of Ontario*;

(4) to ensure total compliance by all employees and contracted personnel with this Program.

The eventual removal of all friable asbestos-containing materials from University buildings is a long-term objective. In the mean time, the University will remove such materials based on prioritization and an assessment of risk. Priority for asbestos removal will be assigned as follows:

(1) All friable asbestos-containing materials must be removed prior to any demolition activity which may result in their disturbance.

(2) Friable asbestos-containing materials which have been damaged to the extent that repair measures are not expected to effectively maintain the material in good condition are to be removed.

(3) Consideration must be given to the proactive removal of friable asbestos-containing materials during major renovation projects or during any major asbestos removal work.

## Program Elements

The basic elements of the Asbestos Control Program are:

(1) a written inventory identifying the locations of all suspected or confirmed friable asbestos-containing material which will be made available online;

(2) the regular inspection of all friable asbestos-containing material to evaluate its condition and the need for remedial action;

(3) the development of risk assessment guidelines to assist in evaluating the potential for exposure to friable asbestos-containing materials;

(4) the maintenance of asbestos-containing materials in good condition;

(5) the prompt remediation of damaged or deteriorating asbestos-containing materials;

(6) the control of access to areas containing friable asbestos-containing material;

(7) the timely training and education of all workers who may disturb friable asbestos-containing material, and all supervisors and project managers who contract or oversee all work that may disturb such materials;

(8) the classification of all asbestos-related work as Type 1, 2 or 3 according to Ontario Reg. 838, RRO 1990 (as amended), and the provision of appropriate safe work procedures, including emergency procedures, in keeping with this classification of work;

(9) the maintenance of records of all asbestos-related work involving friable material;

(10) a medical surveillance program available to all employees who conduct Type 2 or Type 3 asbestos work;

(11) the control and monitoring of external contractors performing work which may disturb friable asbestos-containing material;

(12) a provision for auditing the implementation and effectiveness of the program; and

(13) the notification about the Asbestos Inventory, the Asbestos Control Program, and any asbestos-related work taking place in buildings owned or occupied by the University to building occupants, joint health and safety committees and other persons who work with or around asbestos-containing materials.

## Scope

The Asbestos Control Program applies to all buildings and structures owned by the University of Toronto, to all employees and students of the University, to occupants of University buildings and to external organizations who may come into contact with or disturb asbestos-containing material in University buildings.

## Program Review

The Asbestos Control Program is developed, maintained and administered by the Office of Environmental Health and Safety. The Program will be reviewed once every two years, in consultation with the Asbestos Advisory Committee and the Trades/Utilities Joint Health and Safety Committee.

# 2.0 BACKGROUND AND DEFINITIONS

## 2.1 Background

Asbestos is a generic term describing a number of naturally occurring fibrous minerals that have been used in a wide range of products because of their insulating, acoustical, fire protective and chemical resistant properties. Different types of asbestos include chrysotile, amosite, crocidolite, tremolite, actinolite, or anthrophylite.

During construction from the 1930's up to the late 1970's, asbestos was used in many building materials. To date, many University buildings constructed during that time period still contain some form of asbestos materials, such as:

- sprayed fibrous fireproofing on structural steelwork
- thermal insulation on heaters, boilers, pipes and other mechanical equipment
- decorative or acoustic plasters or finishes on ceilings and walls
- asbestos-cement products, including roofing material, acoustic panelling, electric insulation, laboratory table tops, or water and sewage piping systems
- ceiling tiles
- vinyl floor tiles or sheet flooring.

Asbestos is a known hazardous material. The inhalation of harmful levels of airborne asbestos fibres can lead to serious diseases such as:

- asbestosis (scarring of lung tissue)
- lung cancer
- mesothelioma (a rare form of cancer affecting the lung lining)

The release of asbestos fibres from asbestos-containing materials is primarily a result of activities that result in their disturbance. In order to prevent the exposure of individuals to harmful levels of asbestos fibres, proper precautions and safe work procedures must be implemented whenever any work is conducted on or close to asbestos containing materials. In addition, regular inspections to readily identify damaged or deteriorating materials must be conducted so that they can be promptly addressed.

## 2.2 Definitions

**Asbestos**
Asbestos is a generic term describing a number of naturally occurring fibrous, hydrated mineral silicates that differ in chemical composition and are suitable for use as noncombustible, nonconducting and chemically resistant materials. Different types of asbestos which may be found in buildings are chrysotile, amosite, tremolite, actinolite or anthrophylite.

**Asbestos Abatement/Remediation**
Corrective action taken to minimize or eliminate the hazards associated with asbestos-containing materials, including repair, encapsulation, enclosure or removal.

**Asbestos-Containing Material (ACM)**
Any material found to contain 0.5% or greater content of asbestos, as determined by Polarized Light Microscopy, in accordance with the Ministry of Labour's Code for the Determination of Asbestos from Bulk Samples.

**Asbestos Inventory**
The Asbestos Inventory is a record of the location of all friable asbestos-containing materials present within a building, or those suspected of containing asbestos. The Inventory is available to any employee whose work may result in the disturbance of such materials. The Inventory will

be made available online to employees.

**Friable Material**
Asbestos containing materials may be classified as friable or nonfriable. A **friable material** is defined as a material that, when dry, can be crumbled, pulverized or powdered by hand pressure.

Friable materials present a greater hazard of releasing asbestos fibres than nonfriable materials. Common friable asbestos-containing building materials include sprayed fibrous fireproofing, thermal pipe insulation, and decorative or acoustic texture plasters. Common nonfriable asbestos-containing building materials include asbestos cement boards, ceiling tiles and vinyl floor tiles.

**Minor (Type 2) Asbestos Removal Operations**

Type 2 asbestos removal operations may generate enough airborne asbestos to require protective equipment but are short lived. Short lived activities are less than one shift for any single project, not including setup time. In accordance with guidelines issued by the Ontario Ministry of Labour, minor removal means the removal of up to nine square feet of wet friable material. For a length of pipe, minor removal must not exceed 21 linear feet, even if less than nine square feet of material is involved.

**Major (Type 3) Asbestos Removal Operations**

Type 3 asbestos removal operations may generate significant airborne asbestos levels, may occur frequently, are of longer duration, and may pose a serious risk both to workers and to bystanders. Major removal means the removal of more than nine square feet of wet friable material in one shift (not including setup time), or the removal of more than 21 feet of linear pipe.

## 3.0 RESPONSIBILITIES

This section outlines the responsibilities within the University for implementation of the Asbestos Control Program.

The divisions within Facilities and Services, and Capital Projects may perform or contract work, and have the primary responsibility for controlling access to and authorizing work which may disturb friable asbestos-containing material. This section outlines the unique responsibilities of these divisions, their responsibilities with respect to performing or contracting work, and the responsibilities of other University departments.

Computing and Networking Services, University Computing and Telecommunications & Financial Services both perform and contract work which may require access to building areas containing friable asbestos materials. Responsibilities of the appropriate directors are outlined in this section.

### 3.1 Office of Environmental Health and Safety

The Director, Environmental Health and Safety has the following responsibilities within the Asbestos Control Program:

1. To be responsible for the development, maintenance, quality and effectiveness of the Asbestos Control Program, and to ensure that it meets all legislative requirements and industry standards.

2. To provide technical advice and recommendations regarding asbestos identification, hazard evaluation, and control measures related to asbestos.

3. To provide ongoing asbestos training and education programs.

4. To conduct respiratory protection training and fit-testing for all University employees who may conduct asbestos work, in keeping with the University's Respiratory Protection Program.

5. To develop and maintain a list of employees who work with asbestos, and who have participated in the asbestos training and education programs, and the asbestos medical surveillance program.

6. To provide to the Ministry of Labour personal asbestos exposure records provided by Facilities and Services, Capital Projects and other University departments.

7. To conduct inspections of sprayed asbestos-containing fireproofing and texture coatings at regular intervals to determine their condition and to provide the results of these inspections to the Manager, Environmental Hazards and Safety (F&S).

8. To audit the implementation of this program on an on-going basis.

9. To review the Asbestos Control Program once every two years, in consultation with the Asbestos Advisory Committee and the Trades/Utilities Joint Health and Safety committee.

### 3.2 Asbestos Advisory Committee

The University's Asbestos Advisory Committee (AAC) has been established by and reports to the Vice-President - Human Resources. Members of the AAC will be made up of worker and management representatives from Facilities and Services, Capital Projects, and the Office of

Environmental Health and Safety, as outlined in its Terms of Reference.

The Asbestos Advisory Committee has the following roles:

1. To meet on a regular basis to review notable asbestos-related issues at the University.

2. To make recommendations to management regarding asbestos-related issues at the University, and the implementation and execution of the Asbestos Control Program.

3. To be consulted by the Office of Environmental Health and Safety in its review of the Asbestos Control Program every two years, and to make recommendations for changes.

4. To keep minutes of its meetings.

## 3.3 FACILITIES AND SERVICES (F&S)

### 3.3.1 Manager, Environmental Hazards and Safety

The Manager, Environmental Hazards and Safety, in the Utilities and Building Operations Division, Facilities and Services, has the primary responsibility for the ongoing administration, and implementation of the Asbestos Control Program within all divisions of Facilities and Services, and for overseeing and enforcing the requirements of the Asbestos Control Program for the rest of the University.

The Manager, Environmental Hazards and Safety, has the following responsibilities:

1. To administer, assist in implementing, and enforce the requirements of the Asbestos Control Program for all asbestos work initiated by any division within Facilities and Services.

2. To monitor the implementation of the Asbestos Control Program in all situations and in all departments at the University where planned or unplanned activities may disturb friable asbestos-containing building materials.

3. To work in close liaison with all divisions within Facilities and Services, Capital Projects, the Office of Environmental Health and Safety, and other departments who conduct asbestos-related work to ensure compliance with the Asbestos Control Program.

4. To maintain a written and an online Asbestos Inventory of all University buildings with friable asbestos-containing materials, and to update the Inventory on a regular basis.

5. For buildings with friable asbestos-containing materials, to provide notification to local departments, building occupants, and local joint health and safety committees about the existence and location of the Asbestos Inventory for their building.

6. To ensure that friable asbestos-containing materials in buildings are identified or labelled according to established requirements.

7. To provide, on request, copies of the relevant parts of the building inventory to University departments that may be authorizing or tendering work.

8. To assist internal and external departments in the review of repair, maintenance, renovation or construction activities at the University, and to assist in the classification (Type 1, 2 or 3) of any activities which may result in the disturbance of asbestos-containing materials. This may be done in consultation with the Office of Environmental Health and Safety.

9. To review and approve all Type 2 and Type 3 asbestos work initiated by divisions within Facilities and Services, and any Type 1 asbestos work upon request.

10. To ensure that the Ministry of Labour, Construction Health and Safety Branch, is notified of all Type 3 asbestos work initiated by divisions within Facilities and Services, before the work commences.

11. To ensure that all asbestos work, regardless of which department initiates the work, is only conducted by qualified employees or external contractors, that safe work procedures are in place, and that all other requirements of the Asbestos Control Program are implemented. This shall be accomplished by monitoring the progress of such work and by conducting random site inspections, with documentation of findings and observations.

12. To ensure that competent and reputable asbestos abatement contractors and consultants are used, based on proven service and performance, and documentation of adequate training and experience.

13. To ensure that workplace inspections and evaluation of friable asbestos-containing materials in buildings are conducted on a regular basis, as outlined in Section 4.

14. To conduct or assist in the evaluation of the potential hazard presented by asbestos-containing materials at the University, and the making of recommendations on the appropriate abatement measures required.

15. To respond to reports of asbestos damage or disturbance, the finding of previously-unknown asbestos-containing materials or any asbestos emergency during project activities, and to ensure that appropriate cleanup and abatement are completed in a timely manner.

16. To assist in coordinating abatement activities for damaged or deteriorating asbestos materials for Facilities and Services.

17. To maintain records of all asbestos-related incidents, to report such incidents to the Office of Environmental Health and Safety and to the Trades/Utilities Joint Health and Safety Committee, and to ensure that all such incidents are appropriately investigated with worker involvement from the Trades/Utilities Joint Health and Safety Committee.

18. To maintain work order documentation and records of all asbestos work conducted on University owned or occupied premises.

19. To maintain asbestos exposure reports for all Facilities and Services employees and to forward copies of such reports to the Office of Environmental Health and Safety and to the individual employees on an annual basis.

### 3.3.2. Director, Division of Facilities & Services Contracting or Conducting Asbestos Work

The Director of each Division of Facilities and Services who contracts or conducts work which may disturb friable asbestos material has the following responsibilities:

1. To review all maintenance, repairs and renovation to determine whether friable asbestos containing materials are present and might be disturbed by such activities.

2. To notify prospective internal divisions or external contractors who may be contracted to perform such work with information on the presence and location of friable asbestos-containing materials that have the potential for being disturbed (see Section 10.1).

3. To classify all asbestos work under his/her jurisdiction as Type 1, Type 2 or Type 3, in consultation with the Manager, Environmental Hazards and Safety (F&S) as needed.

4. To obtain approval of asbestos work classification from the Manager, Environmental Hazards and Safety (F&S) prior to authorizing the start of asbestos work.

5. To ensure that the Ministry of Labour, Construction Health and Safety Branch, is notified of all Type 3 operations before the work commences;

6. To be responsible for all asbestos work (Type 1, Type 2, and Type 3) performed by his/her staff or by external individuals whom he/she contracts to do the work and to ensure that all such work is conducted in accordance with the Asbestos Control Program by regular monitoring of the progress of the work and regular site inspections.

7. To ensure that his/her employees who are permitted access to areas containing friable asbestos material and who may disturb this material have been provided with proper training and education, and have been given the opportunity to participate in the University's asbestos medical surveillance program;

8. To ensure that external contractors who are permitted access to areas containing friable asbestos material and who may disturb this material have been provided proper training and education (see Section 9);

9. To provide a notification and description of all projects involving Type 2 or Type 3 asbestos work, reasonably in advance of the commencement of the work, to:
   (a) the Manager, Environmental Hazards and Safety;
   (b) the Director, Property Management & Maintenance for areas involving the building fabric;
   (c) the Director, Utilities & Building Operations for areas under the control of Utilities & Building Operations;
   (d) the Director of Environmental Health and Safety;
   (e) the co-chairs of the Trades/Utilities joint health and safety committee; and
   (f) the co-chairs of the appropriate local joint health and safety committee.

10. To be responsible for notifying and liaising with building occupants and local joint health and safety committees regarding the precautions for all major Type 2 or Type 3 asbestos work involving repair, maintenance and renovation taking place in their building;

11. To maintain records of all Type 1, 2 or 3 asbestos work for which he/she is responsible and to forward copies to the Manager, Environmental Hazards and Safety (F&S).

12. To respond to reports of asbestos damage or disturbance, and to ensure that appropriate cleanup and abatement are completed in a timely manner.

13. To respond to asbestos spills, the finding of previously-unknown asbestos-containing materials, or other asbestos emergency at the University.

14. To maintain asbestos exposure records of all his/her staff, as specified in the Asbestos Control Program, and to forward these records on an annual basis to the Manager, Environmental Hazards and Safety (F&S) and to the pertinent workers;

### 3.3.3. Director, Utilities and Building Operations, Facilities and Services

In addition to those responsibilities listed under Section 3.3.2, the Director, Utilities and Building Operations, Facilities and Services has the following responsibilities under the Asbestos Control Program:

1. To control access to all Utilities areas which contain friable asbestos material;

2. To conduct visual inspections of friable asbestos material within Utility rooms at regular intervals to determine its condition;

3. To maintain records of these inspections.

4. To ensure that work requests are promptly submitted to clean up, repair or remove any damaged asbestos material noted on inspections, and that such measures are carried out in a timely manner.

### 3.3.4 Director, Property Management & Maintenance, Facilities and Services

In addition to the general responsibilities listed under Section 3.3.2, the Director, Property Management & Maintenance, Facilities and Services has the following responsibilities under the Asbestos Control Program:

1. To ensure damaged friable asbestos-containing material identified on work requests is promptly repaired.

2. To ensure that work requests are promptly submitted to clean up, repair or remove any damaged asbestos material noted on the building fabric, and that such measures are carried out in a timely manner.

3. To ensure that occupants of the buildings listed in Appendix A are informed, by appropriate signage, of the presence of sprayed asbestos fireproofing and of the appropriate procedures to be followed.

### 3.3.5 Director, Building Services and Grounds, Facilities and Services

In addition to the general responsibilities listed under Section 3.3.2, the Director, Building Services and Grounds, Facilities and Services has the following responsibilities under the Asbestos Control Program:

1. To ensure that clean-up of flood water in buildings with asbestos-containing sprayed fireproofing is conducted by properly trained employees.

2. To ensure that all his/her staff are properly informed about the location of asbestos containing materials they may potentially disturb in the course of their work.

3. To ensure that all his/her staff are properly trained in any activities involving asbestos, including emergency procedures or response procedures.

## 3.4 CAPITAL PROJECTS (CP)

### 3.4.1 Asbestos Coordinator (CP)

The Asbestos Coordinator (CP) is responsible for the ongoing administration, implementation and enforcement of the Asbestos Control Program for all activities or projects conducted or contracted by Capital Projects which have the potential to disturb friable asbestos-containing materials.

The Asbestos Coordinator role will be designated by the Director, Capital Projects. The

Asbestos Coordinator will have the following responsibilities:

1. To administer, assist in implementing, and enforce the requirements of the Asbestos Control Program for all asbestos work conducted or contracted by Capital Projects.

2. To work in close liaison with the Manager, Environmental Hazards and Safety (F&S), all divisions within Capital Projects, Facilities and Services, and the Office of Environmental Health and Safety to implement the Asbestos Control Program.

3. To provide copies of the relevant parts of the Asbestos Inventory to employees who may be authorizing or tendering work, and to contractors who may be bidding for such work.

4. To assist internal divisions in the review of all renovation or construction activities of proposed projects, and to assist in the classification (Type 1, 2 or 3) of all activities which may result in the disturbance of asbestos-containing materials. This may be done in consultation with the Manager, Environmental Hazards and Safety (F&S), or the Office of Environmental Health and Safety.

5. To review and approve all Type 2 or Type 3 asbestos work conducted or contracted by Capital Projects, or Type 1 asbestos work upon request.

6. To ensure that the Ministry of Labour, Construction Health and Safety Branch, is notified of all Type 3 operations contracted by Capital Projects, before the work commences.

7. To ensure that asbestos work is only conducted by qualified employees or external contractors, that safe work procedures are in place, and that all other requirements of the Asbestos Control Program are implemented. This shall be accomplished by monitoring the progress of such work and by conducting random site inspections, with documentation of findings and observations.

8. To ensure that competent and reputable asbestos abatement contractors and consultants are used, based on proven service and performance, and documentation of adequate training and experience.

9. To respond to reports of asbestos damage or disturbance, the finding of previously-unknown asbestos-containing materials or any asbestos emergency during project activities, and to ensure that appropriate cleanup and abatement are completed in a timely manner.

10. To maintain documentation and records of all asbestos work conducted by Capital Projects on University premises, and to forward a copy of such records to the Manager, Environmental Hazards and Safety (F&S).

11. To maintain records of asbestos exposure reports for all Capital Projects employees and to forward copies to the Office of Environmental Health and Safety and to the individual employees on an annual basis.

12. To maintain records of all asbestos-related incidents, and to ensure that all such incidents are appropriately investigated.

### 3.4.2. Director, Capital Projects
### Manager, Design and Engineering

The Director of Capital Projects, and the Manager, Design and Engineering, through Project Managers, Design Engineers and other employees within Capital Projects, may authorize, contract or conduct work which may disturb friable asbestos material. The Director, Capital Projects and the Manager, Design and Engineering have the following responsibilities:

1. To review all maintenance, repairs and renovation to determine whether friable asbestos containing materials are present and might be disturbed by such activities.

2. To notify prospective internal or external contractors who may be contracted to perform such work with information on the presence and location of friable asbestos-containing materials that have the potential for being disturbed (see Section 10.1).

3. To classify all asbestos work under his/her jurisdiction as Type 1, Type 2 or Type 3, in consultation with the Asbestos Coordinator (CP) as needed.

4. To obtain approval of asbestos work classification from the Asbestos Coordinator (CP) prior to authorizing the start of asbestos work.

5. To ensure that the Ministry of Labour, Construction Health and Safety Branch, is notified of all Type 3 operations before the work commences.

6. To be responsible for all asbestos work (Type 1, Type 2, and Type 3) performed by his/her staff or by external individuals whom he/she contracts to do the work and to ensure that all such work is conducted in accordance with the Asbestos Control Program by regular monitoring of the progress of the work and regular site inspections.

7. To ensure that all employees who will be responsible for managing, overseeing or coordinating work that may disturb friable asbestos, prior to commencing such activities, shall receive appropriate training and education in keeping with the level of asbestos work they may be involved with.

8. To ensure that his/her employees and external contractors who are permitted access to areas containing friable asbestos material and who may disturb this material have been provided proper training and education, and have been enrolled in the asbestos medical surveillance program, in accordance with the Asbestos Control Program.

9. To provide a notification and description of all projects involving major Type 2 or Type 3 asbestos work, reasonably in advance of the commencement of the work, to:
   (a) the Manager, Environmental Hazards and Safety;
   (b) the Director, Property Management & Maintenance for areas involving the building fabric;
   (c) the Director, Utilities & Building Operations for areas under the control of Utilities & Building Operations;
   (d) the Director of Environmental Health and Safety; and
   (e) the Trades/Utilities joint health and safety committee.

10. To be responsible for notifying and liaising with building occupants and local joint health and safety committees regarding the precautions for all major Type 2 or Type 3 asbestos work involving repair, maintenance and renovation taking place in his/her building.

11. To maintain records of all Type 1, 2 or 3 asbestos work for which he/she is responsible and to forward copies to the Asbestos Coordinator (CP).

12. To respond to reports of asbestos damage or disturbance, and to ensure that appropriate cleanup and abatement are completed in a timely manner.

13. To respond to asbestos spills, the finding of previously-unknown asbestos-containing materials, or other asbestos emergency at the University.

14. To maintain asbestos exposure records of all his/her staff, as specified in the Asbestos Control Program, and to forward these records on an annual basis to the Manager, Environmental Hazards and Safety (F&S) and to individual workers;

## 3.5 Director, Facility Resources (U of T at Mississauga) Manager, Facilities Management (U of T at Scarborough)

The Responsibilities include those outlined in Sections 3.3 to 3.4.

## 3.6 Director, Computing and Networking Services, University Computing Director, Telecommunications & Financial Services

The Director, Computing and Networking Services, University Computing, and the Director, Telecommunications & Financial Services have the following responsibilities under the Asbestos Control Program.

1. To ensure that their staff or contractors do not access the area above the false ceiling for any reason, in all buildings which contain sprayed asbestos fireproofing above a "false ceiling" (see Appendix A for list of buildings), without:
   (a) having received appropriate training under the Asbestos Control Program; and
   (b) having received the approval of the Manager, Environmental Hazards and Safety (F&S) to access the ceiling space;

2. Before contracting or authorizing work involving the building fabric, to contact the Director, Property Management & Maintenance or designate to ascertain if friable asbestos containing material is present and might be disturbed by the work.

3. To notify employees or contractors who may perform activities that may disturb friable asbestos containing material of the presence and location of such materials (see Section 10.1)

4. To classify all asbestos work under his/her jurisdiction as Type 1, Type 2 or Type 3, in consultation with the Manager, Environmental Hazards and Safety (F&S) as required.

5. To obtain approval of asbestos work classification from the Manager, Environmental Hazards and Safety (F&S) prior to authorizing the start of asbestos work.

6. To ensure that the Ministry of Labour, Construction Health and Safety Branch, is notified of all Type 3 operations before the work commences.

7. To be responsible for all asbestos work (Type 1, Type 2, and Type 3) performed by his/her staff or by external individuals whom he/she contracts to do the work and to ensure that all such work is conducted in accordance with the Asbestos Control Program by regular monitoring of the progress of the work and regular site inspections.

8. To ensure that his/her employees and external contractors who are permitted access to areas containing friable asbestos material and who may disturb this material have been provided proper training and education, and have been enrolled in the asbestos medical surveillance program, in accordance with the Asbestos Control Program;

9. To provide a notification and description of all projects involving major Type 2 or Type 3 asbestos work, reasonably in advance of the commencement of the work, to:
   (a) the Manager, Environmental Hazards and Safety (F&S);
   (b) the Director, Property Management & Maintenance for areas involving the building fabric;
   (c) the Director, Utilities & Building Operations for areas under the control of Utilities & Building Operations;
   (d) the Director of Environmental Health and Safety; and
   (e) the Trades/Utilities joint health and safety committee.

10. To be responsible for notifying and liaising with building occupants and local joint health and safety committees regarding the precautions for all major Type 2 or Type 3 asbestos

work involving repair, maintenance and renovation taking place in his/her building;

11. To maintain records of all Type 1, 2 or 3 asbestos work for which he/she is responsible and to forward copies to the Manager, Environmental Hazards and Safety (F&S).

12. To respond to reports of asbestos damage or disturbance, and to ensure that appropriate cleanup and abatement are completed in a timely manner.

13. To respond to asbestos spills, the finding of previously-unknown asbestos-containing materials, or other asbestos emergency at the University.

14. To maintain asbestos exposure records of all his/her staff, as specified in the Asbestos Control Program, and to forward these records on an annual basis to the Office of Environmental Health and Safety and to individual workers.

## 3.7 All Department Heads

All Department Heads have the following responsibilities with respect to the Asbestos Control Program:

1. To ensure that all employees in the department are familiar with and comply with their responsibilities under the Asbestos Control Program.

2. To ensure that, where a building contains sprayed asbestos fireproofing above a "false ceiling", their employees do not access the area above the false ceiling (see Appendix A for list of buildings) unless they have been properly trained to do so and have gotten appropriate approval from the Manager, Environmental Hazards and Safety (F&S).

3. To ensure that employees and other building occupants are notified of scheduled asbestos work within their workplace.

4. To ensure that all employees in the department are informed about the location of friable asbestos-containing materials present in their workplace which may be disturbed in the course of their duties, the location of the Asbestos Inventory for their workplace, and their access to it.

5. To notify Facilities and Services when they suspect the presence of damaged asbestos containing material in their workplace.

6. Before authorizing work involving the building fabric, to contact their building Property Manager who will determine if friable asbestos containing material is present and might be disturbed by the work. (Note: the Property Manager must be contacted for all work which may impact the building fabric.)

## 3.8 Employees and Students

University employees and students have the following responsibilities:

1. To be familiar with and work in compliance with the requirements of the Asbestos Control Program as it applies to his/her work.

2. To not access the area above the false ceiling in any building which contains sprayed asbestos fireproofing above a "false ceiling" (see Appendix A for list of buildings), unless they have been properly trained to do so.

3. To abide by all access control restrictions posted on areas containing friable asbestos

material.

4. To immediately notify his/her supervisor of any damage to suspected or known asbestos containing material in his/her work or study environment.

## 3.9 Occupational Health Service
## Health and Well-Being Programmes and Services

The Manager, Health and Well-Being Programmes and Services has the following responsibilities:

1. To develop, implement and maintain an asbestos medical surveillance program, under a licensed physician. University employees may voluntarily participate in the program if they conduct or have conducted Type 2 or Type 3 asbestos work

2. To make health assessments available to University employees:
   - prior to assignment to Type 2 or Type 3 asbestos work (baseline exam);
   - after an accumulated 1000 hours of Type 2 or Type 3 asbestos work;
   - at least every two years thereafter; and
   - at more frequent intervals if directed by the physician.

3. To include in the heath assessments:
   - a medical and work history;
   - a physical examination;
   - chest x-rays;
   - pulmonary function tests (lung capacity); and
   - any other exam or test directed by the physician

4. To maintain all employee medical information in strict confidence within the Occupational Health Service. Copies of an employee's medical records and/or test results may be provided to his/her family physician on written consent.

5. To provide the results of the medical examinations and tests, and recommendations regarding any employee's work limitations, to the employee.

6. To provide a report of any recommendations regarding an employee's work limitations to the employee's supervisor and to the Office of Environmental Health and Safety, and to facilitate all necessary job accommodation.

7. To provide an annual report and summary of the asbestos medical surveillance program in a confidential manner to department heads, local joint health and safety committees, and the Office of Environmental Health and Safety.

## 3.10 External Contractors

External contractors have the following responsibilities:

1. To provide written acknowledgement that they have read and will comply with the requirements of the Ontario Regulation respecting Asbestos on Construction Projects and in Building and Repair Operations and the University's Asbestos Control Program.

2. To ensure that all employees under his/her control are informed about the location of friable asbestos containing materials that may be disturbed.

3. To work in a manner to avoid the disturbance of asbestos containing materials, other

than those asbestos work activities he/she has been contracted to carry out.

4. To ensure that all employees under his/her control are properly trained in asbestos hazards and control procedures prior to conducting any work that may disturb asbestos, and to provide documentation of this to the department contracting the work (see Section 9).

5. To ensure that workers immediately stop all work and notify the department contracting the work in the event that previously unidentified asbestos-containing materials are discovered in the course of work (see Appendix G).

6. To ensure that all asbestos waste is safely packaged and properly disposed in accordance with legislative requirements and with the Asbestos Control Program.

# 4.0 INSPECTION AND ASSESSMENT

## 4.1 Asbestos Inventory

The Asbestos Inventory is a record of the type and locations of known and suspected friable asbestos-containing materials in a given building. The preparation and maintenance of an up-to-date Asbestos Inventory is an important component in the Asbestos Control Program, as it enables:

(a) the condition of such materials to be inspected and assessed on a scheduled basis, in order to determine the need for cleanup and remediation of damaged material; and
(b) appropriate controls to be put in place when work is done at a location which might disturb the asbestos.

1. The University has prepared a written Asbestos Inventory of the locations of known or suspected friable asbestos materials (suspected or known) in buildings and structures owned by the University. Asbestos surveys and periodic inspections provide the data for the inventory for each building.

2. The Asbestos Inventory will be accessible online to University employees.

3. The Inventory for each building contains the following information:
   (a) building address;
   (b) type of friable material (sprayed fireproofing, texture coating, or thermal insulation);
   (c) the location within the building of the material;
   (d) an indication as to whether the material has been sampled to determine if it contains asbestos, or whether it is assumed to contain asbestos;
   (e) if known to be asbestos, the type of asbestos;

3. Copies of the written inventory shall be placed in the following locations:
   (a) Designated Location in the building to which the inventory refers (see Appendix B);
   (b) Manager, Environmental Hazards and Safety (F&S)
   (c) Director, Utilities and Building Operations;
   (d) Director, Property Management and Maintenance;
   (e) Manager, Trade Services;
   (f) Director, Environmental Health and Safety; and
   (g) Trades/Utilities Joint Health and Safety Committee.

   The primary record shall be that maintained by the Manager, Environmental Hazards and Safety (F&S), in the Utilities and Property Management Division.

4. The responsibility for maintaining an up-to-date inventory lies with the Manager, Environmental Hazards and Safety (F&S).

5. The inventory shall be made readily available for inspection to the relevant Joint Health and Safety Committees and any building occupant who so requests.

## 4.2 Periodic Re-Inspections and Hazard Reporting

Visual inspection of friable asbestos containing materials must be conducted on a scheduled basis in order to monitor the condition of the materials and the need for cleanup or abatement measures.

1. The Director, Environmental Health and Safety shall ensure that regular inspections of friable asbestos-containing sprayed fireproofing and texture coating previously identified in building inventories are conducted **once every two years,** and shall provide the results of these

inspections to the Manager, Environmental Hazards and Safety (F&S).

2. Visual inspections of other friable asbestos materials (i.e. thermal insulation) in Utility rooms and above ceiling spaces where there is no sprayed fireproofing, shall be conducted by the staff of Utilities and Building Operations, and the Trades/Utilities Joint Health and Safety Committee such that all materials are inspected **at least annually.** An inspection record noting the condition of the materials will be forwarded to the Manager, Environmental Hazards and Safety (F&S).

3. Visual inspections of other friable asbestos materials (i.e. thermal insulation) in the Steam Tunnels shall be conducted **on an annual basis** by the staff of Utilities and Building Operations. An inspection record noting the condition of the materials will be forwarded to the Manager, Environmental Hazards and Safety (F&S).

4. Where damaged material is noted in the course of the above inspections, a work request shall promptly be initiated by Utilities and Building Operations Division (F&S). The Manager, Environmental Hazards and Safety (F&S) must ensure that the damaged material is repaired in a timely manner.

5. Where Trades or Utilities employees, in the course of their work, identify damaged asbestos-containing material, they shall submit a hazard report to their supervisor, who will ensure that the damaged material is promptly repaired. A copy of the hazard report shall be forwarded to the Manager, Environmental Hazards and Safety (F&S).

6. All other individuals must report damaged asbestos-containing material to their supervisors who in turn shall report this to the building Property Manager. The Property Manager shall inform the Manager, Environmental Hazards and Safety (F&S) of this.

## 4.3 Bulk Sampling

A limited number of bulk samples may be taken to determine the presence of asbestos in a suspect building material.

1. Bulk samples shall be taken in accordance with the standard procedure for bulk sampling.

2. Bulk samples may only be conducted by employees who have been properly trained in the procedure.

3. The Trades/Utilities joint health and safety committee is to be informed when bulk samples are collected, and a worker member on the committee be given the opportunity to be present at the start of sampling.

## 4.4 Hazard Assessment and Remediation Guidelines

1. Periodic inspections of asbestos-containing materials must be accompanied by a hazard assessment by competent individuals to determine the potential risk of exposure to asbestos fibres. Competent individuals are those who have been properly trained in the evaluation of potential asbestos exposure risk.

2. To assist in the hazard evaluation, the following factors* related to a given asbestos-containing material are to be considered:
   - the condition of the material
   - the accessibility of the material to area occupants
   - the level of activity and movement in the area of the material
   - the degree of friability of the material
   - asbestos content of the material

- the type of asbestos
- the location of the material in a supply or return air plenum
- the degree of exposed surface area of the material
- the presence of water damage

3. Recommendations for remedial work shall be based on the results of the hazard assessment.

## 5.0 REPAIR AND MAINTENANCE

1. Where it is determined by an inspection or by any other means that friable material is in a condition such that exposure to the material is likely to occur, the Director, Property Management & Maintenance, the Director, Utilities & Building Operations, or the Director, Capital Projects, as appropriate, shall immediately take steps to limit access to and repair the material.

2. The appropriate Director in 5.1 shall determine whether the material contains asbestos and, if so, the type of asbestos.

3. All friable material shall be assumed to contain asbestos unless identified as otherwise in the Asbestos Inventory or until an examination shows that the material does not contain asbestos.

4. Where it is readily apparent that friable asbestos-containing material used as fireproofing or acoustical or thermal insulation has fallen and will continue to fall because of its deterioration, the fallen material shall be cleaned up and removed and the insulation shall be repaired, sealed, removed, or permanently enclosed.

5. When any work, cleanup or repair is to be carried out in an area where friable material is present and the material may be disturbed, Facilities and Services, and Capital Projects shall identify on any work orders whether or not the friable material contains asbestos. If the material contains asbestos, the work order shall contain the following additional information:
   - the work classification (Type 1, 2, or 3)
   - the type of asbestos (chrysotile, amosite, crocidolite),
   - drawings, if appropriate, showing the location of the material,

6. Cleanup/repair of the material shall be carried out by the appropriate Type 1, 2 or 3 procedure as established by the Office of Environmental Health and Safety. Records must be kept by the Manager, Environmental Hazards and Safety (F&S) of all Type 1, Type 2 and Type 3 work.

7. All Type 1, Type 2 and Type 3 work involving asbestos-containing material shall be approved in advance by the Manager, Environmental Hazards and Safety (F&S) or the Asbestos Coordinator (CP) depending on the project.

8. The appropriate Director shall ensure that the Ministry of Labour, Construction Health and Safety Branch is notified of all Type 3 operations before the work commences.

9. Where work is done which significantly changes the building inventory (e.g a major removal of asbestos), the Manager, Environmental Hazards and Safety (F&S) shall amend the building inventory to indicate the changes.

10. Facilities and Services, and Capital Projects shall prepare and maintain procedures for reporting of problems and conducting repair and maintenance operations in buildings which contain friable asbestos-containing material.

11. Facilities and Services, and Capital Projects shall remove all friable asbestos containing materials prior to any demolition activity where such materials may be disturbed in the course of work.

12. Facilities and Services, and Capital Projects shall consider the proactive removal of asbestos containing building materials when planning any maintenance, renovation or construction activities that will expose such materials.

## 6.0 ACCESS CONTROL

1. Access to rooms controlled by Utilities and Building Operations which contain friable asbestos material (e.g. mechanical and electrical rooms, service shafts, tunnels) shall be restricted. Such areas shall be locked and accessible only to authorized personnel. Signs shall be posted in a prominent location immediately inside and outside such areas warning of the presence of friable asbestos material, the precautions to be taken, and a contact phone number to report damage.

2. All access to other building areas for work involving friable asbestos-containing material must be approved by the Director, Property Management & Maintenance.

3. Where sprayed asbestos-containing fireproofing is present in a building above a false ceiling, special procedures shall be put in place to restrict access to the ceiling space. Building occupants shall be advised of the presence of this asbestos and that access is prohibited. One of the signs is shown in Appendix C; this will be placed prominently in buildings with sprayed asbestos-containing fireproofing on the St. George Campus. For other campuses a similar sign shall be used giving the appropriate telephone number.

Appendix A lists those University buildings which contain sprayed asbestos-containing fireproofing.

# 7.0 CLASSIFICATION OF ASBESTOS WORK

## 7.1 Asbestos Work Classifications

Ontario Reg. 838, RRO 1990 (as amended) defines three classification of asbestos work, Types 1, 2 and 3, based on the asbestos hazard they present. The airborne concentration of asbestos generated by the work and the duration of exposure are the two main factors used to evaluate the hazard.

**Type 1 Operations**

A Type 1 operation is defined as one that does not generate appreciable levels of airborne asbestos and generally presents little hazard to workers or bystanders. An example of this is the installation or removal of limited quantities of bound asbestos products such as vinyl asbestos floor tiles.

**Type 2 Operations**

Type 2 operations are small scale activities which may generate enough airborne asbestos to require protective equipment, but are short lived. Short lived activities are less than one shift for any single project, not including setup time. An example of this would be minor maintenance or repair work above false ceilings where sprayed asbestos fireproofing is present on beams. In accordance with guidelines issued by the Ontario Ministry of Labour, minor removal means the removal of up to nine square feet of wet friable material. For a length of pipe, minor removal must not exceed 21 linear feet, even if less than nine square feet of material is involved.

**Type 3 Operations**

Type 3 asbestos operations are generally large scale activities which may generate significant airborne asbestos levels, may occur frequently, are of longer duration, and may pose a serious risk both to workers and to bystanders. An example of this is the major removal of friable asbestos during building renovations or before demolition. Major removal means the removal of more than nine square feet of wet friable material in one shift (not including setup time), or the removal of more than 21 feet of linear pipe.

For a more explicit definition of the three types of asbestos operations, refer to the Ontario Reg.838, RRO 1990 (as amended).

## 7.2 Standard Operating Procedures

Detailed work procedures for asbestos work have been issued by the Office of Environmental Health and Safety, and are outlined in the manual *Asbestos Control Program - Standard Operating Procedures.* These include the following:

**Type 1 Operations**

1.00 Nonfriable Asbestos Disturbance
1.10 Inspection of Friable, Asbestos-Containing, Sprayed Fireproofing Above False Ceilings (Special Application)
1.20 Missing-Tile Replacement (Minor Operation)
1.21 Removal of Asbestos-Containing, "Lay-In" Ceiling Tiles (Minor Operation)
1.30 Removal of Vinyl-Asbestos Floor Tiles (Minor Operation)
1.31 Removal of Asbestos-Containing Sheet Flooring
1.40 Removal of Asbestos-Cement Board Products (Minor Operation)
1.50 Re-Keying of Fire-Rated Doors with Friable Asbestos-Containing Core Material
1.60 Clean-Up of (Flood) Water in Buildings with Asbestos-Containing Sprayed Fireproofing

**Type 2 Operations**

2.00 Minor Friable Asbestos Disturbance
2.01 Clean-up of Friable Asbestos Material
2.02 False-Ceiling Entry (Type 2)
2.03 Inspection of Friable, Asbestos-Containing, Sprayed Fireproofing in Sidney Smith Hall
2.04 Drilling of Holes in the Plaster Application and Backing of the Walls and Ceilings that Contain Friable Asbestos-Containing Material at 21 Sussex Ave.
2.10 Minor Friable Asbestos Removal
2.11 Minor Repair of Thermal Insulation
2.12 Removal of Asbestos-Containing Pipe Insulation Using a Glove Bag
2.13 Removal of Aircell from Light Boxes in the Hart House Library
2.20 Removal of Asbestos-Containing "Lay-In" Ceiling Tiles (Major Operation)
2.30 Removal of Vinyl-Asbestos Floor Tiles (Major Operation)
2.40 Removal of Asbestos-Cement Board Products (Major Operation)
2.50 Minor Alteration of Fire-Rated Doors with Friable, Asbestos-Containing Core Material
2.60 Replacement of HEPA Vacuum Filters/Bag
2.70 Replacement of Air-Handling-Unit Filters Servicing Areas Open to Asbestos-Containing Sprayed Fireproofing

**Type 3 Operations**

3.00 Major Friable Asbestos Removal

## 7.3 Emergency Procedures

Emergency procedures have been developed to prevent or minimize the potential for hazardous exposure to airborne asbestos fibres in a range of emergency situations.

### 7.3.1 Unexpected Asbestos Release

In the event that an individual disturbs or encounters damaged asbestos-containing material, known or suspected, all activities in the area must immediately stop and the procedures outlined in Appendix G followed in order to minimize the potential of the individual or other building occupants for exposure to airborne asbestos fibres.

### 7.3.2 Exit Procedures for Injured Asbestos Workers

In the event that an emergency arises during Type 2 or Type 3 asbestos work, special procedures to remove individuals from an asbestos enclosure by emergency personnel are outlined in Appendix G.

## 8.0 POTENTIALLY EXPOSED WORKERS

The term "potentially exposed worker" means "a worker who may work in close proximity to friable asbestos-containing material and who may disturb the material".

### 8.1 University Employees

1. All employees of the University who are designated as potentially exposed to friable asbestos shall be given the appropriate training as outlined in Section 9.

2. Only individuals who have been trained to the standards outlined in Section 9 of this program will be permitted to perform work which may disturb friable asbestos containing material.

3. Facilities and Services is responsible for identifying and recording the names of those of their employees who may be potentially exposed to friable asbestos during the course of their work, for informing these workers of the presence of the asbestos, and for ensuring that they receive appropriate training.

4. Computing & Networking Services, and Telecommunications & Financial Services is responsible for identifying those of their employees who may be potentially exposed to friable asbestos during the course of their work, for informing these workers of the presence of asbestos, and for ensuring that they receive appropriate training.

5. University employees who may be exposed to friable asbestos during the course of their work or who may contract others to do work that may involve asbestos activities are placed in one of three exposure categories based on the type of work they perform and their potential exposure to asbestos:

   - Employees in **Exposure Category A** are those who perform both Type 1 and Type 2 asbestos work.

   - Employees in **Exposure Category B** are those who manage, oversee or coordinate, asbestos work or who contract others to do work that may involve asbestos activities.

   - Employees in **Exposure Category C** are those who perform Type 1 work and Type 2 inspections and clean-up only.

   - Employees in **Exposure Category D** do not perform work with asbestos. They may potentially be exposed if in the course of their work, they inadvertently damage material which encloses or encapsulates asbestos-containing material.

   Appendix D lists examples of the various occupations which fall within each of these categories.

6. Facilities and Services, Capital Projects, Computing & Networking Services and Telecommunications & Financial Services are responsible for preparing an Asbestos Exposure Report as shown in Appendix F for all of their employees who work in a Type 2 (or Type 3) operation. This report shall be completed annually (calendar year) and immediately upon termination of the employment of the worker. The report shall be submitted to the Office of Environmental Health and Safety with a copy to the worker.

7. On an annual basis, the Office of Environmental Health and Safety shall submit a copy of the Asbestos Exposure Reports to the Chief Physician, Ontario Ministry of Labour.

8. All potentially exposed workers must follow the appropriate procedures for the control of

asbestos fibres as established by the Office of Environmental Health and Safety, and Facilities and Services.

## 8.2 External Contractors

1. The Director, Division of Facilities and Services or the Director, Capital Projects must obtain approval from the Manager, Environmental Hazards and Safety (F&S) and the Asbestos Coordinator (CP), respectively, for all major Type 2 and all Type 3 asbestos work. As part of that approval process, they must ensure that the contractor's workers have received appropriate training to perform the work safely;

2. Contractors must provide written acknowledgement that:
   - they have read and will comply with the requirements of the Ontario Regulation respecting Asbestos on Construction Projects and in Building and Repair Operations;
   - they have read and will comply with the University's Asbestos Control Program;
   - failure to comply with the above can result in immediate termination of the project and their removal from the approved contractors list.

3. External contractors must provide written evidence that all workers have received appropriate instruction in the following:
   - hazards of asbestos,
   - use, cleaning and disposal of respirators and protective clothing,
   - entry and exit from work areas,
   - use of showers (Type 3),
   - all aspects of Type 2 and/or Type 3 work and protective measures.

4. External contractors must provide written evidence that their on-site supervisor has received the instruction (as outlined above) through a designated asbestos course of at least 2 days duration.

5. External contractors must follow the appropriate procedures for the control of asbestos fibres as established by the Asbestos Control Program, and will be provided with a checklist to assist them in implementing these procedures.

## 9.0 TRAINING AND EDUCATION

1. All University employees who work around and who may disturb friable asbestos containing material shall receive training and education commensurate with their degree and risk of exposure.

2. Prior to commencing such activities, all University employees who will be responsible for managing, overseeing or coordinating work that may disturb friable asbestos shall receive appropriate training and education in keeping with the level of asbestos work they may be involved with.

3. University Employees in **Exposure Category A** shall receive at least 3 days of training in:
   - the hazards of asbestos exposure;
   - the types and locations of asbestos containing material at the University;
   - the use, care and disposal of protective equipment;
   - personal hygiene; and
   - appropriate work practices and procedures.

4. University Employees in **Exposure Category B** shall receive at least 2.5 days of training in:
   - the hazards of asbestos exposure;
   - the types and locations of asbestos containing material at the University;
   - the use, care and disposal of protective equipment;
   - personal hygiene; and
   - appropriate work practices and procedures.

5. University Employees in **Exposure Category C** shall receive at least 2.5 day of training which shall cover:
   - the hazards of asbestos exposure;
   - the types and locations of asbestos containing material at the University;
   - the use, care and disposal of protective equipment;
   - personal hygiene; and
   - appropriate work practices and procedures.

6. University Employees in **Exposure Category D** shall receive at least 2 hours of instruction in:
   - the hazards of asbestos exposure,
   - the types and locations of asbestos containing material at the University; and
   - appropriate work practices and procedures.

7. Attendance records will be kept by individual supervisors to record the type of training and the dates training was given to employees.

8. Individual project coordinators or managers must obtain written evidence from external contractors that all workers have received appropriate instruction (as outlined in Section 8) in the following:
   - the hazards of asbestos,
   - the use, cleaning and disposal of respirators and protective clothing,
   - entry and exit from work areas,
   - the use of showers (Type 3),
   - all aspects of Type 2 and/or Type 3 work and protective measures.

9. Individual project coordinators or managers must obtain written evidence from external contractors that their on-site supervisor has received the instruction through a designated asbestos course of at least 2 days duration.

Training requirements are outlined in Appendix E.

## 10.0 EXTERNAL CONTRACT WORK

External contractors and consultants must be reputable in the field of asbestos consulting and management, and must be able to demonstrate compliance with the requirements outlined in this Program.

1. Before authorizing work on any buildings or structures where friable material may be disturbed or removed, Facilities & Services or Capital Projects shall provide a report to any prospective contractors as part of the work specification.

   The report shall contain the following information:
   (a) whether the friable material contains asbestos and if so the type of asbestos. If the material has not previously been sampled then sampling and analysis will be required at this time. If the material is shown not to contain asbestos then the report shall state this.
   (b) drawings and plans to show the location of the friable material containing asbestos that will be handled or disturbed;
   (c) if the material contains asbestos, specifications and procedures for the work indicating the type of operation (Type 1, 2 or 3).

   In most cases, the building inventory may form the basis for this report. In some circumstances additional inspections or sampling may be required.

2. Where a Department other than Facilities and Services, and Capital Projects contracts work which could result in the disturbance of friable asbestos material it is the responsibility of the person authorizing the work to contact the building property manager to inquire of the presence of friable material and to obtain the report referred to in Section 10.1.

3. The classification of the work as Type 1,2, or 3 is the responsibility of the department authorizing the work. The Manager, Environmental Hazards and Safety (F&S) and the Asbestos Coordinator (CP) will review all Type 2 and Type 3 asbestos work to ensure that the work has been appropriately classified. Where there is some uncertainty about the classification of any asbestos work, the authorizing department must consult with the Manager, Environmental Hazards and Safety (F&S), the Asbestos Coordinator (CP) or the Office of Environmental Health and Safety.

4. Type 2 work and all Type 3 work **must** be approved by the Manager, Environmental Hazards and Safety (F&S), or the Asbestos Coordinator (CP).

5. Where the general contractor for the work subcontracts part of the work, Facilities and Services, Capital Projects or the authorizing department shall ensure that the general contractor provides to the subcontractor a copy of the report identified in Section 10.1.

6. External contractors must provide written evidence that their workers have received appropriate training and education as outlined in this Program.

7. Facilities and Services, Capital Projects or the authorizing department shall ensure that general contractors and subcontractors follow the appropriate procedures.

8. All Type 3 work shall be subject to inspections by appropriately qualified and experienced personnel chosen by the Director of the appropriate Division in Facilities and Services, or Capital Projects, or designate.

10. Type 2 work shall be subject to inspection by appropriately qualified and experienced personnel at the discretion of the Director of the appropriate Division in Facilities and Services, or Capital Projects or designate.

11. The Office of Environmental Health and Safety shall be informed of all Type 3 work and major Type 2 work reasonably in advance of commencement of the work.

12. The Trades/Utilities Joint Health and Safety Committee, and the Joint Health and Safety Committee of the building involved shall be informed of all Type 3 work and major Type 2 work reasonably in advance of the commencement of the work.

13. The appropriate Director, Division of Facilities & Services, or Capital Projects shall ensure that the Ministry of Labour, Construction Health and Safety Branch is notified of all Type 3 operations undertaken before the work commences.

14. Where during the course of work, friable material is discovered which was not referenced in the report referred to in Section 10.1. the contractor shall immediately stop work which may disturb that material and inform the department responsible for the contract.

    The department responsible for the contract shall immediately notify the Manager, Environmental Hazards or his designate, who shall report the discovery, orally and in writing, to an inspector of the Construction Health and Safety Branch, Ministry of Labour and the Office of Environmental Health and Safety. The written report shall contain the following information:

    (1) the name and address of the person giving the notice;
    (2) the building and address where the work is taking place;
    (3) a description of the work;
    (4) the starting date and scheduled duration of the work;
    (5) the name and address of the contractor in charge of the work;
    (6) the name and address of the contact responsible for overseeing the work.

15. Where friable material has been discovered as per Section 10.13, work shall not resume until it has been determined whether or not the material contains asbestos and the type of asbestos. If the material is found to contain asbestos, work shall not resume until the appropriate procedures (Type 1,2 or 3) have been put in place.

## 11.0 PROGRAM AUDIT

1. The Office of Environmental Health and Safety shall audit various components of the asbestos control program on an annual basis and prepare a report to the Vice-President, Human Resources, the Trades/Utilities Joint Health and Safety Committee and the appropriate building Joint Health and Safety Committee(s).

2. The audit may consist of but is not limited to the following:
   (a) inspections of buildings to confirm the presence and completeness of the inventory;
   (b) inspections of asbestos work in progress to confirm adherence to the procedures;
   (c) review of training records to confirm that workers have had appropriate training to work with asbestos;
   (d) review of worker exposure records.

3. A Joint Health and Safety Committee may, as part of their inspection of the workplace and subject to the access control procedures established under this program, inspect the condition of friable materials identified in the inventory. Copies of their inspection reports and recommendations shall be sent to the Manager, Environmental Hazards and Safety (F&S), and to the Director, Environmental Health and Safety.

## Appendices

Appendix A - Buildings Containing Sprayed Asbestos Insulation

Appendix B - Asbestos Inventory - Designated Locations

Appendix C - Asbestos Signage

Appendix D - Categories of Employees Potentially Exposed to Asbestos

Appendix E - Asbestos Training Modules for University Employees

Appendix F - Asbestos Exposure Report

Appendix G - Emergency Procedures (to be added)

# APPENDIX A

| University of Toronto<br>BUILDINGS CONTAINING SPRAYED ASBESTOS INSULATION | | | |
|---|---|---|---|
| **#** | **Buildings with Significant Areas of Sprayed Insulation** | **#** | **Buildings with Minor Areas of Sprayed Insulation** |
| 1 | Sidney Smith Hall (33)<br>100 St. George St. | '7 | University College (1)<br>15 King's College Circle |
| 2 | Galbraith Building (70)<br>35 St. George St. | 8 | Koffler Student Services Centre (143)<br>214 College St. |
| 3 | Medical Sciences Building (5)<br>1 King's College Circle | 9 | McLennan Physical Laboratories (78)<br>60 St. George St. |
| 4 | 215 Huron Street (67) | 10 | Ramsay Wright Zoological Labs (72)<br>25 Harbord St. |
| 5 | Dentistry Building (65)<br>124 Edward Street | 11 | Flavelle House (40)<br>78 Queen's Park |
| 6 | Edward Johnson Building (51)<br>80 Queen's Park | | |

# APPENDIX B

## ASBESTOS INVENTORY --- Designated Locations

**November 1992 Listing**

| BLDG NO. | BUILDING | INVENTORY Designated Location |
|---|---|---|
| 1 | University College<br>15 King's College Circle | Principal |
| 2 | Hart House<br>7 Hart House Circle | Warden |
| 3 | Sigmund Samuel Library<br>9 King's College Circle<br>Dept. of English<br>Dept. of French<br>7 King's College Circle | Dept. Head,<br>Sigmund Samuel Library<br><br>Chair, Dept. of English |
| 4 | McMurrich Building<br>12 Queen's Park Cres. West | Associate Dean<br>Community Health<br>Faculty of Medicine<br>McMurrich Bldg. |
| 5 | Medical Sciences Bldg.<br>1 King's College Circle | Dean, Faculty of Medicine, MSB |
| 6 | J.P. Robarts Research Library<br>130 St. George Street | Health and Safety, Fire and Security Coordinator<br>Robarts Library |
| 6A | Claude T. Bissell Bldg.<br>140 St. George Street | Dean, Faculty of Library & Information Sciences<br>Bissell Bldg. |
| 6B | Thomas Fisher Rare Book Library<br>120 St. George Street | Health and Safety, Fire and Security Coordinator<br>Robarts Library |
| 7 | Mining Building<br>170 College Street East | Technical Coordinator<br>Centre for Biomaterials<br>Mining Bldg. |
| 8 | Wallberg Building<br>184 College Street | Chair, Dept. of Chemical Engineering & Applied Chemistry<br>Wallberg Bldg. |
| 16 | Banting Institute<br>100 College Street | Chair, Dept. of Pathology<br>Banting Institute |
| 18 | Central Steam Plant<br>19 Russell Street | Chief Engineer |
| | Steam Tunnel Network | |
| 19 | Development & University Relations<br>21 King's College Circle | Vice-President, Development & University Relations |
| 20 | Rosebrugh Building<br>4 Taddle Creek Road | Chair, Dept. of Industrial Engineering<br>Rosebrugh Bldg. |
| 21 | Engineering Annex<br>11 King's College Road | Head Librarian<br>Computer Science Library |
| 22 | Mechanical Engineering Building<br>5 King's College Road | Co-chair, Joint H&S Committee<br>Mech. Eng. Bldg. |

| BLDG. NO. | BUILDING | INVENTORY Designated Location |
|---|---|---|
| 8A | D.L. Pratt Building<br>184 College Street (rear) | Chair, Dept. of Metallurgy & Materials Science<br>Wallberg Bldg. |
| 9 | Sandford Fleming Bldg.<br>10 King's College Road | |
| 10 | Simcoe Hall<br>27 King's College Circle | Director<br>Office of the President<br>Simcoe Hall |
| 10A | Convocation Hall<br>31 King's College Circle | |
| 11 | Tanz Neuroscience<br>6 Queen's Park Cres. West | Center for Research in Neurodegenerative Diseases |
| 12A | Devonshire House North<br>3 Devonshire Place | Dean<br>Devonshire House Residence |
| 12B | Devonshire House South<br>3 Devonshire Place | |
| 12C | Devonshire House East<br>3 Devonshire Place | |
| 13 | Whitney Hall<br>85 St. George Street | Dean of Women<br>79 St. George Street |
| 14 | Faculty of Education<br>371 Bloor Street West | |
| 27 | Physical Geography Building<br>45 St. George Street | Head Technician<br>Dept. of Geography |
| 28 | Architecture Building<br>230 College Street | Dean,<br>School of Architecture & Landscape Architecture |
| 29 | Sir Daniel Wilson Residence<br>73 St. George Street | Dean of Women<br>79 St. George<br>(U.C. Union) |
| 30 | Varsity Stadium<br>277 Bloor Street West | Facilities Manager<br>Varsity Arena |
| 30A | Varsity Arena<br>275 Bloor Street West | Facilities Manager<br>Varsity Arena |
| 31 | 16 Hart House Circle<br>Dept. of Classics<br>Ombudsperson | Chair<br>Dept. of Classics |
| 32 | Wetmore Hall:<br>New College I<br>21 Classic Avenue | Principal, New College<br>Rm 109, 300 Huron St |

# ASBESTOS INVENTORY --- Designated Locations

## November 1992 Listing

| BLDG NO. | BUILDING | INVENTORY Designated Location |
|---|---|---|
| 23 | University College Union<br>79 St. George Street | Dean of Women<br>79 St. George Street<br>(U.C. Union) |
| 24 | Haultain Building<br>170 College Street (rear) | Administrative Assistant<br>Inst. of Env. Studies<br>Haultain Bldg. |
| 25 | Fitzgerald Building<br>150 College Street | Occupational &<br>Environmental Health<br>Unit, Room 140<br>Fitzgerald Bldg. |
| 26 | Cumberland House<br>33 St. George Street | Administrative Assistant<br>International Student<br>Centre |
| 36 | Nursing Building<br>50 St. George Street | Bldg. Administrator<br>Nursing Bldg. |
| 37 | Administration Bldg. DDO<br>137 Hillsview Drive<br>Richmond Hill | Admin. Asst.<br>D.D.O. |
| 37A | Dome DDO | |
| 38A | Woodsworth College<br>119 St. George Street | |
| 38B | Drill Hall<br>117 St. George Street (rear) | |
| 39 | 49 St. George Street | |
| 40 | Flavelle House<br>78 Queen's Park | Admin. Asst.<br>Bldg. Supervisor<br>Rm. 344, Faculty of Law |
| 43 | School of Graduate Studies<br>65 St. George Street | Director of<br>Administration<br>School of Grad. Studies<br>65 St. George Street |
| 45 | 42 St. George Street | Remedial Work in<br>basement (1992) |
| 45A | Garage<br>42 St. George Street | |
| 46 | Varsity Newspaper<br>44 St. George Street | Remedial Work in<br>basement (1992) |
| 47 | Canadiana Gallery<br>14 Queen's Park Cres. West | Curator<br>Canadiana Gallery |
| 48 | Glendon Labs and Greenhouse | |

| BLDG. NO. | BUILDING | INVENTORY Designated Location |
|---|---|---|
| 32A | Wilson Hall:<br>New College II<br>40 Willcocks Street | Principal, New College<br>Rm 109, 300 Huron St. |
| 33 | Sidney Smith Hall<br>100 St. George Street | Co-chair, JHSC<br>Dept. of Fine Arts |
| 34 | Massey College<br>4 Devonshire Place | Master,<br>Massey College |
| 35 | Royal Conservatory of Music<br>273 Bloor Street West | R.C.M. |
| 49A | Air Cushion Vehicle Testing Lab | |
| 50 | Falconer Hall<br>84 Queen's Park | Assoc. Dean of Administration,<br>Faculty of Law<br>Falconer Hall |
| 51 | Edward Johnson Bldg.<br>80 Queen's Park | |
| 52 | Best Institute<br>112 College Street | Chair, BBDMR<br>Best Institute |
| 53 | Institute of Child Study<br>45 Walmer Road | Librarian<br>ICS |
| 54 | 1 Spadina Crescent | Manager,<br>Parking Services |
| 55 | President's Residence<br>93 Highland Avenue | |
| 56 | Graduate Students' Union<br>16 Bancroft Avenue | Executive Assistant<br>Grad. Stud. Union |
| 57, 59 | Bancroft Hall/Building<br>4 Bancroft Avenue | Director, U.T.C.S. |
| 58 | 256 Huron Street | |
| 61 | Borden Building South<br>487 Spadina Avenue | Grounds Supervisor<br>Bldgs. & Grounds<br>South Borden Bldg. |
| 61A | Borden Building North<br>563 Spadina Avenue | Grounds Supervisor<br>Bldgs. & Grounds<br>South Borden Bldg. |
| 62 | Earth Sciences Centre | |

# ASBESTOS INVENTORY --- Designated Locations

## November 1992 Listing

| BLDG NO. | BUILDING | INVENTORY Designated Location |
|---|---|---|
| 49 | Aerospace Building<br>4925 Dufferin Street | H&S Coordinator<br>Inst. for Aerospace Studies |
| 63 | 631 Spadina Avenue | Admin. Asst.<br>School of Phys & Hlth Education<br>320 Huron St.<br>Room 227 |
| 65 | Dentistry Building<br>124 Edward Street | Dean, Faculty of Dentistry |
| 67 | 215 Huron Street | Manager<br>Trade Services<br>Facilities & Services<br>215 Huron Street |
| 68 | Clara Benson Building<br>320 Huron Street | Facilities Mgr.<br>Dept. of Athl.& Recr.<br>Warren Stevens Bldg. |
| 68A | Warren Stevens Building<br>55 Harbord Street | Facilities Mgr.<br>Dept. of Athl. & Recr.<br>Warren Stevens Bldg. |
| 69 | U of T Press - Campus Printing & Design (prev. Alumni House)<br>47 Willcocks Street | Manager<br>Campus Printing & Design |
| 70 | Galbraith Building<br>35 St. George Street | Dean, Faculty of Applied Science & Engineering, Rm. 173 |
| 71 | 92 College Street<br>Dept. of Obstetrics & Gynaecology | Chair, Dept. of Obstetrics and Gynaecology |
| 72 | Ramsay Wright Zoological Labs<br>25 Harbord Street | Admin. Asst.<br>Dept. of Zoology |
| 73 | Lash Miller Chemical Labs<br>80 St. George Street | Administrator<br>Dept. of Chemistry |
| 74 | 581 Spadina Avenue | Chief of Police |
| 75 | Faculty Club<br>41 Willcocks Street | Manager, Faculty Club |
| 76 | 45 Willcocks Street | Director,<br>Residence, Food & Beverage Services<br>45 Willcocks St. |
| 93 | Electrometallurgy Lab<br>11 King's College Road | |
| 97 | Centre for Medieval Studies<br>39 Queen's Park Cres. East | Director<br>Centre for Medieval Studies |
| 97A | McLuhan Program in Culture and Technology<br>39A Queen's Park Cres.East | Director<br>McLuhan Centre for Culture & Technology |
| 100 | Coach House,<br>121 St. Joseph Street | |
| 102 | Soldier's Tower<br>7 Hart House Circle | |

| BLDG. NO. | BUILDING | INVENTORY Designated Location |
|---|---|---|
| | | |
| 77 | Sussex Court<br>21 Sussex Avenue | Chair, Dept. of Slavic Languages & Literature<br>Sussex Court |
| 78A | McLennan Physical Laboratories<br>60 St. George Street | Administrative Officer<br>Dept. of Physics |
| 78B | Linac Labs | Added to McLennan Inventory |
| 79 | F. Norman Hughes Pharmacy Building<br>19 Russell Street | Dean, Faculty of Pharmacy |
| 81 | St. George Graduate Residence<br>321 Bloor Street West | Residence Coordinator |
| 82 | Gage Research Building<br>223 College Street | Clinic Secretary<br>First Floor Medical Clinic |
| 83 | 254/256 McCaul Street | Acting Chair, Dept. of Rehabilitation Medicine |
| 84 | CIUT Radio<br>91 St George Street | Station Manager<br>CIUT Radio |
| 88 | Centre for Industrial Relations<br>123 St. George Street | Acting Director<br>Centre for Ind. Relns. |
| 89 | Admissions Office<br>315 Bloor Street West | Director of Admissions |
| 89B | Outbuilding B | |
| 90 | Speech Pathology<br>88 College Street | Chair<br>Reception Area<br>Speech Pathology |
| 91 | Studio Theatre<br>4 Glen Morris Street | |
| 125 | 703 Spadina Avenue | Administrative Officer<br>Faculty of Education<br>371 Bloor Street West |
| 132 | Innis College<br>2 Sussex Avenue | Resid. & Bldg. Mgr.<br>Innis College |
| 137 | Astronomer's Residence<br>DDO | DDO |
| 137A | Gate House DDO | |
| 138 | Caretaking Services<br>370 Huron Street | Manager<br>Caretaking Services |

# ASBESTOS INVENTORY --- Designated Locations

## November 1992 Listing

| BLDG NO. | BUILDING | INVENTORY Designated Location |
|---|---|---|
| 103 | School of Continuing Studies<br>158 St. George Street | Director<br>S.C.S. |
| 104 | Economics Department, N & S House<br>150 St. George Street | Admin. Asst.<br>Dept. of Economics |
| 110 | Media Centre<br>121 St. George Street | Director<br>Media Center |
| 111 | 246 Bloor Street West | Asst. Dean<br>Faculty of Mgt. |
| 113 | Vladimir House<br>651 Spadina Avenue | Resid. & Bldg. Mgr.<br>Innis College |
| 115 | 97 St. George Street | Chair, Dept. of German |
| 117 | W.B. MacMurray Field House<br>60 Sussex Avenue | Administrative Officer<br>Faculty of Education<br>371 Bloor Street West |
| 120 | Louis B. Stewart Observatory (SAC)<br>12 Hart House Circle | Business Manager<br>SAC |
| 121 | U of T Press Building,<br>5201 Dufferin Street,<br>Downsview | Traffic & Safety Officer |
| 121A | Butler Bldg, U of T Press, Downsview | |
| 122 | North West Chiller Plant | Chiller Plant Control Room |
| 200 | Scarborough College (Parts 1 & 2)<br>Main Buildings | Director of Administration |
| 200 | Scarborough College (Part 3) Other Buildings:<br>Student Residences<br>Soil Erosion Lab<br>Day Care Centre<br>Principal's Residence<br>Harbutt's Residence | Director of Administration |
| 311 | Erindale College North Building | Chief Administrative Officer |
| 313 | Erindale College South Building | |
| 300's | Erindale College Other Buildings:<br>Physical Plant<br>Crossroads Building<br>Blind Duck Pub<br>Tuck Shop Portable<br>Theatre Building<br>Geology Lab Building | |
| 300's | Erindale College Residences | |
| 625 | Gull Lake - Minden | |
| 628 | Pine Spring - Dorset | |
| 677 | Parking Services, 1 Spadina Crescent | |

| BLDG. NO. | BUILDING | INVENTORY Designated Location |
|---|---|---|
| 139 | Campus Co-Op Day Care Centre<br>124 Devonshire Place | Business Coordinator<br>C. Coop Daycare |
| 139A | - | |
| 140 | Varsity Ice Plant | |
| 141 | Margaret Fletcher Day Care Centre<br>100 Devonshire Place | Supervisor<br>M.F. Daycare Centre |
| 142 | 713 Spadina Avenue | Administrative Officer<br>Faculty of Education<br>371 Bloor Street West |
| 143 | Koffler Student Services Centre<br>214 College Street | Director, Career Centre |
| 144 | Chemical Waste Containment Facility | |
| 145 | Koffler Inst. for Pharmacy Management<br>575 Spadina Avenue | |
| 150A | Central Services | |
| 172 | MacDonald-Mowatt House<br>63 St. George Street | Director, SGS,<br>65 St. George St. |
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# ASBESTOS INVENTORY --- Designated Locations

**November 1992 Listing**

| BLDG NO. | BUILDING | INVENTORY Designated Location |
|---|---|---|
| 730A | 368 Huron St., Res. Food & Bev. Service | |
| 764* | 40 Sussex Ave. | |
| 766 | 43 Sussex Ave. Res. Indian Affairs | |
| 785 | 18 Washington Ave. (Law Res.) | |
| 935E | Sauna Shack | |
| 935F | Drive Shed | |
| 940 | Glendon Cottage 2265 Bayview Avenue | |
| 935 | Hart House Farm - Caledon | |
| 935A | Snyder House | |
| 935B | Ignatief House | |
| 935C | Bryce Hall | |
| 935D | Barn Shed | |

| BLDG. NO. | BUILDING | INVENTORY Designated Location |
|---|---|---|
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## APPENDIX C

ASBESTOS

# ASBESTOS CONTROL PROGRAM

THIS BUILDING CONTAINS SPRAYED ON ASBESTOS
FIRE-PROOFING CONSTITUTING A POTENTIAL EXPOSURE
TO ASBESTOS FIBRES IF
**DISTURBANCES OCCUR ABOVE THE FALSE CEILINGS.**

ALL OCCURRENCES OF REMOVED OR DAMAGED CEILING TILES
AND BROKEN OR DAMAGED PIPE INSULATION
SHOULD BE REPORTED IMMEDIATELY.

1. CALL LOCAL #3000
2. REPORT YOUR NAME - PHONE NUMBER - AND EXACT LOCATION OF THE DAMAGE.
3. INFORM YOUR DEPARTMENT HEAD OR SUPERVISOR OF THE INCIDENT.
4. **IF IN DOUBT ABOUT ANY HAZARDS CALL LOCAL #3000.**

# APPENDIX D

## EXPOSURE CATEGORIES OF UNIVERSITY OF TORONTO EMPLOYEES POTENTIALLY EXPOSED TO ASBESTOS

Some University of Toronto employees may perform work which could disturb friable asbestos containing material. The majority of these employees are within Facilities and Services, and Capital Projects. University employees do not generally perform Type 3 asbestos work; such work is contracted out. Employees can be placed in three categories which depend on the type and extent of their potential exposure to asbestos.

### Category A

Employees in Category A perform both Type 1 and Type 2 asbestos work. Employees in this category include:

**Facilities and Services:**

Trades (e.g. electricians, plumbers, steamfitters, carpenters, painters, machinists, sheet metal workers, locksmiths)

Operating Engineers
Insulation Technician
Sr. Mechanical Technician
Prev. Maintenance Technician
Control Technicians/Supervisor
Superintendent Engineers
Elevator Mechanics

### Category B

Employees in Category B manage, oversee or coordinate asbestos work, or contract others to do work that may involve asbestos activities. They may also perform Type 1 work and Type 2 inspections. Employees in this category include:

**Facilities and Services:**

Chief Engineer, Steam Plant
Property Managers

**Capital Projects**

Project Managers
Project Coordinators
Construction Coordinators
Design Engineers
Designers
Drafters

**Computing and Networking Services and Telecommunications & Financial Services**

Communications Officer
Engineering Technologists
Network Analysts

**Category C**

Employees in Category C can perform Type 1 work and Type 2 inspections and cleanup only. This category will include:

**Facilities and Services**

Designated caretaking staff:

- Those who perform cleanup in areas where there are minor amounts of asbestos contamination such as might occur after flooding in buildings with sprayed fireproofing.

**Category D**

Employees in Category D do not perform work with asbestos. They may potentially be exposed if in the course of their work they inadvertently damage material which encloses or encapsulates asbestos containing material. Such employees include:

- Most caretaking staff/cleaners
- Service workers who move furniture

These employees would not cleanup or repair any damage, but would notify their supervisor of the situation.

# APPENDIX E

## ASBESTOS TRAINING MODULES FOR UNIVERSITY OF TORONTO EMPLOYEES

| Training Module | Duration | Employee Exposure Category | | | |
|---|---|---|---|---|---|
| | | A | B | C | D |
| **Module 1:** Asbestos: Evaluating and Controlling the Hazard | 1.5 days | X | X | X | |
| **Module 2:** Small Scale, Short Duration Asbestos Activities -- A Practical Program | 1 day | X | | | |
| **Module 3:** Managing Asbestos Projects under the Asbestos Control Program | 0.5 day | | X | | |
| **Module 4:** Respiratory Protection | 0.5 day | X | X | X | |
| **Module 5:** Designated Caretakers Workshop | 0.5 day | | | X | |
| **Module 6:** Asbestos Awareness | 2 hours | | | | X |
| Total Duration | | 3 days | 2.5 days | 2.5 days | 2 hours |

# APPENDIX F

## ASBESTOS EXPOSURE REPORT
UNIVERSITY OF TORONTO

(As Required by Ontario Reg.838, RRO 1990, made under the Occupational Health & Safety Act of Ontario)

1. **Worker Identification**

Surname _____

Given Names _____

Address _____

Date of Birth _____

Social Insurance Number _____

2. **Employer Identification**

Name _____

Operating Department _____

Address _____

3. This report covers the period beginning _____ and ending _____

4. Set out below the number of hours of exposure during the period for each category of Type 2 exposure.

| *Category of exposure | Hours of exposure |
|---|---|
| A | _____ |
| B | _____ |
| C | _____ |
| D | _____ |
| **Other (Describe)** | |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

cont'd

*The categories of Type 2 exposure are:

**A.** The removal of a false ceiling or part there of to obtain access to a work area where a significant quantity of friable asbestos is likely to be lying on the surface of the false ceiling.

**B.** The minor removal or minor disturbance of friable material containing asbestos during the repair, alteration, maintenance or demolition of a building, or any machinery or equipment, or part thereof.

**C.** The enclosure of friable material containing asbestos.

**D.** The application of tape or a sealant or other covering to pipe or boiler insulation containing asbestos.

**Other.** Being Type 2 work not described in categories A to D.

**Note: Work records for Type 1 asbestos operations are not required and Type 3 asbestos activities are not conducted by Facilities & Services or other U of T staff.**

5. Name of worker's physician _____

   Address _____

6. Date report prepared _____

_____

**SIGNATURE (SUPERVISOR)**

This report to be completed by the Operating Department and returned to:

Occupational Hygiene & Safety
Office of Environmental Health & Safety
215 Huron Street, 7th Floor

The Operating Department will copy:

1) Worker
2) File

The Office of Environmental Health & Safety will retain a copy and submit the original report to:

Chief Physician
Ministry of Labour
Occupational Health & Safety Branch
Professional & Specialized Services
400 University Avenue, 8th Floor
Toronto, Ontario M7A 1T7

# APPENDIX G

## Procedures in the Event of Unexpected Asbestos Release
### (DRAFT pending review)

In the event that an individual unexpectedly disturbs or discovers damaged known or suspected asbestos-containing material, the following procedures are to be immediately implemented to prevent or minimize the exposure of individuals to airborne asbestos fibres, and to report the incident to the appropriate authorities.

1. Immediately stop all activities which may disturb the friable asbestos material.

2. Leave the area, and do not resume any work in the area until advised to do so by the supervisor or Project Manager. If work clothing or equipment have been contaminated with asbestos, do not leave the immediate work area until appropriate decontamination has been carried out.

3. Promptly notify your supervisor, who in turn will inform the Property Manager or Project Manager in charge of the work, and the Manager, Environmental Hazards and Safety (or the Asbestos Coordinator (CP) for all Capital Projects work).

4. The supervisor or Project Manager must shut down the ventilation system to and from the affected area.

5. The supervisor or Project Manager, in consultation with the Manager, Environmental Hazards and Safety (or the Asbestos Coordinator (CP) if involving Capital Projects work), will:

   (a) Determine whether the material contains asbestos or not, by consulting with the Asbestos Inventory and/or taking a bulk sample for rush analysis.

   (b) Arrange for appropriate asbestos remediation and cleanup should the results be positive for asbestos.

   (c) Give authorization for return to work when safe to do so.

   (d) Investigate the incident and determine the cause. Prepare a list of all employees who were involved in the incident and who may have been exposed to asbestos.

   (e) Complete an Accident/Incident report and submit to the Health and Wellbeing Programmes and Services office, with a copy to the Manager, Environmental Hazards and Safety, the Trades/Utilities Joint Health and Safety Committee, and the Office of Environmental Health and Safety.

   (f) After a complete investigation of the incident, file a written report detailing the events, the cause and the control measures taken to prevent recurrence, in consultation with the Manager, Environmental Hazards and Safety, with a copy to the Office of Environmental Health and Safety and the Trades/Utilities Joint Health and Safety Committee.

   (g) For all confirmed asbestos materials, to complete an Asbestos Exposure report and an Accident/Incident report for each employee that has been exposed.

   (h) Provide any employee potentially exposed to asbestos as a result of the incident, with the opportunity to consult with the Occupational Health Service or their own physician.

# APPENDIX G

## Exit Procedures for Injured Asbestos Workers
### (Draft, pending review)

In the event that an emergency arises during Type 2 or Type 3 asbestos work, these procedures provide guidance for removing an injured worker from a contaminated asbestos work site, and for preventing undue exposure to emergency response workers.

1. If an employee has been appropriately trained and it can safely be done, he/she can provide first aid to the injured party.

2. Contact the University of Toronto's Campus Emergency phone number (416-978-2222 - St. George Campus, or 9-911) and the supervisor or Project Manager.

3. If the injured worker is ambulatory and can be moved safely from the contaminated work area, follow standard decontamination procedures prior to removing the injured worker from the contaminated area.

4. If the injured worker is not ambulatory or movement of the injured worker would be unsafe, in waiting for the emergency response personnel:

   (a) Make the injured party as comfortable as possible.

   (b) Conduct standard decontamination procedures on the injured worker only if it is safe to do so. Clean obvious contamination from the worker using the HEPA vacuum or damp wiping methods.

   (c) Mist and clean the work area using water to reduce fibre levels prior to the arrival of the emergency response personnel.

   (d) Emergency response personnel are to wear respirators equipped with HEPA filters and disposable coveralls prior to entering the contaminated work area.

   (e) Assist the emergency response personnel in covering the injured party with clean polyethylene prior to removal from the work area.

   (f) Continue to mist the work area with water during and after the removal of the injured party.