YORK UNIVERSITY

ASBESTOS MANAGEMENT PROGRAM

11th REVISION: December 2014
Health, Safety & Employee Well-Being
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GLOSSARY

ACM  Asbestos Containing Materials
HSEWB  Health, Safety and Employee Well Being
ERP  Emergency Response Procedures
CSBO  Campus Services and Business Operations
Friable Materials  Materials that can be crumbled by hand pressure when dry and become airborne
HEPA  High Efficiency Particulate Air Filter
HMIS Online  Hazardous Materials Information Online Asbestos Database
JHSC  Joint Health and Safety Committee
MOL  Ministry of Labour
OH&S Act  Occupational Health and Safety Act
PCM  Phase Contrast Microscopy
Supervisor  A person who has charge of a workplace or authority over workers
TDGA  Transportation of Dangerous Goods Act
TWAEV  Time-Weighted Average Exposure Value
Worker  A person who performs work or supplies services for monetary reward

Competent Person (OHSA Reg.851) means a person who,

(a)  is qualified because of knowledge, training and experience to organize the work and its performance.
(b)  is familiar with this Act and the regulations that apply to the work, and
(c)  has knowledge of any potential or actual danger to health or safety in the workplace.
I. OBJECTIVES

The objectives of the Asbestos Management Program include:

(1) the prevention of occupational illness arising from exposure to airborne asbestos fibres through maintenance of an inventory of asbestos by location, form, and condition; safe work procedures, notification, personal log of workers' exposure, air sampling and waste handling;

(2) the prevention of hazardous exposure of members of the York University Community to airborne asbestos fibres through safe work procedures by workers, monitoring, training and the establishment of the emergency response procedure; and

(3) Compliance with the Occupational Health & Safety Act (OH&S Act) and its regulations respecting asbestos.
II PHILOSOPHY

University employees, and others contracted to do work for the University, have the right to know about asbestos at the University: its location, the forms in which it is found, its current condition, and how to safely do work that may disturb it.

Asbestos is a useful but hazardous substance known to cause cancer and lung disease when fibres are inhaled. The health risks associated with asbestos increases with the level and duration of exposure. Carefully conducted removal is an optimal solution, in the mean time a stringent control program is required to reduce the risk to the community of exposure to airborne asbestos fibres.

III LEGISLATION OR STANDARD

Occupational Health and Safety Act

- Designated Substances – Asbestos on Construction Projects and in Buildings and Repair Operations (O.Reg. 278/05)
- Designated Substances (O.Reg. 490/09)

III PROGRAM REVIEW FREQUENCY

This program will be reviewed once every two years in consultation with the Joint Health and Safety Committee (JHSC) and Health and Safety Representatives.

A copy of the updated program will be posted on the HSEWB website (www.yorku.ca\dohs\programs).
IV  ASBESTOS INVENTORY

The University has established, and maintains an updated room-by-room, building-by-
building inventory of friable and non-friable asbestos containing materials and their
condition and risk assessment which:

- identifies and locates all asbestos containing materials,
- estimates the quantity of asbestos containing materials,
- assesses the hazards of asbestos-containing materials, and
- determines the asbestos content and accessibility.

Inventory information can be obtained from the Health, Safety and Employee Well Being
(HSEWB).

V  ROLES AND RESPONSIBILITIES

The Occupational Health and Safety Act (sec.25) provides a description on the roles and
responsibilities of employers, supervisors and workers. Below are additional responsibilities for
specific workplace parties relevant to the Asbestos Management Program:

Supervisor of workers performing asbestos work

- Enforce safe work procedures as required under O.Reg.278/05 to ensure compliance.
- Follow acceptable internal procedures for asbestos related work.
- Classify the type of operations and ensure required procedures are followed.
- Complete work permit (see section VIII) for all asbestos work.
- Provide (organize or coordinate) safety training for employees who work with asbestos.
- Provide personal protective equipment where required under this program.
- Arrange for initial respirator fit testing for workers.
- Ensure workers wear and maintain protective equipment, such as respirators.
- Complete Asbestos Removal Tracking Form where arrangement has been made for the
removal of asbestos.
- Maintain worker exposure records as required by O.Reg.278/05.

HSEWB

- Provide asbestos safety training, upon request from supervisor or at least annually
- Perform initial respirator fit testing for workers
- Update York University asbestos inventory as required

Revised December 2014
• Provide consultation and response (e.g., assessment, testing and providing recommendation) to concerns on asbestos and asbestos incident
• Distribute Asbestos Work Reports to departments that have workers performing asbestos work
• Review the Asbestos Management Program in consultation with the JHSCs and Health and Safety Representatives once every two years
• Liaise with the Ontario Ministry of Labour

JHSCs

• Participate in the review of the Asbestos Management Program
• Receives written notices of a varied measure or procedure on asbestos work
• Review all asbestos related accident/incident reports forwarded by HSEWB
• Worker members to participate at the beginning of occupational hygiene testing to ensure that the test methods are valid

Persons Hiring Contractors

(a) Notify the contractor of the location of asbestos-containing materials, in writing when they may encounter asbestos, as part of the Request for Proposal specification or where tenders are not sought as part of the agreement to perform work.
(b) Require contractor to follow York University standards regarding all asbestos procedures and comply with Reg. 490/09 and Reg. 278/05.
(c) Require contractor to ensure no exposure to the York University Community to airborne asbestos.
(d) Must obtain and complete a Work Notification for HSEWB approval before starting work via CSBO Coordinator.
(e) Ensure that where any inadvertent disturbance of asbestos during the course of work, the CSBO Coordinator and HSEWB will be notified immediately.

Contractors - Refer to Section XI (2).

VI EDUCATION

1. University Residents and Commercial Tenants/Leasees

Information letter and instruction will be provided annually to university residents and commercial tenants and leasee of buildings containing asbestos materials. An example for information to residents is included in Appendix IX, as required under O.Reg 278/05, sec 8 (3)(b) and by Housing Services and Capital Cost Accounting and Lease Administration in CSBO.
a. Background information will be provided to residents concerning the following:

- Types of Asbestos
- Health Effects from exposure to asbestos
- Precautionary Measures
- York University's Management Program

b. Location and Form of Asbestos

c. Method of Reporting Concerns

2. **Workers, Supervisors and Project Coordinators from CSBO who perform or coordinate asbestos work.**

Asbestos safety Training provided by HSEWB includes:
A half-day theory course for anyone who performs or coordinates asbestos work and a half-day hands-on on session for workers performing asbestos removal work

Note: the worker and the coordinator are two different groups. The coordinator may participate in a hands on manner in the removal (e.g. if the coordinator is a zone supervisor). However, a project coordinator would not since this would be done by a contractor. Coordinators and workers take the same training.

In addition to background information, the course will include:
- an overview of asbestos regulations,
- Asbestos Inventory and York University Management Program,
- the classifications of asbestos-related work,
- the hazard of asbestos exposure,
- the use, care and disposal of personal protective equipment,
- the work practices, procedures and personal protective equipment needed for each type of asbestos work as specified by the regulation,
- sampling and collection,
- building of Type 2 enclosure (hands-on)

Re-training takes place once every three years by attending a half-day theory course provided by HSEWB.

York University employees do not perform Type 3 operations. Contractors who perform Type 3 removal operations must have successfully completed the Asbestos Abatement Worker Training Program or the Asbestos Abatement Supervisor Program approved by the Ministry of Training, Colleges and Universities.
VII ASBESTOS MONITORING PROCEDURE

Once Asbestos-containing Material is identified in an area, it will be regularly monitored by visual inspection based on hazard ratings as established in the asbestos survey. In addition, it will be inspected whenever work is done in the area or when damage is suspected. If necessary, air monitoring will be conducted on an ad hoc basis, using Phase Contrast Microscopy (PCM) as appropriate. In all cases, the relevant JHSC(s) of the area will be advised that testing is to occur. The presence or absence of a member of the committee will not prevent the continuation of the job.

Air monitoring of asbestos may be done when there is reason to believe that:

a. Asbestos may have been disturbed - e.g. during renovation or repair work,
b. Asbestos may have been spilled or damaged - e.g. water damage, damage from earthquake, vibration etc.

1. Visual Monitoring Frequency

   (a) Upon request whenever a disturbance is suspected, and
   (b) Annually

2. Method

   a. Visual:

      CSBO conducts an annual review of the condition of asbestos materials in their zones and produces a list of the asbestos materials that need to be repaired.

      CSBO will perform annual visual inspection where there are asbestos sprayed fireproofing above the ceiling tiles. Where deterioration or damage of ACM is observed, upon request an occupational hygienist from HSEWB will also inspect and confirm the condition of the area.

      The inspection would focus on signs of asbestos damage, deterioration, disturbance in which asbestos fibres may be released. In addition, the inspection will also report on the replacement of asbestos-containing material with non-asbestos-containing material. Where repair is necessary, internal asbestos procedures will be followed. In all cases, the Asbestos Inventory will be updated annually from information provided by CSBO.

   b. Bulk sample collection. The minimum number of samples to be collected is shown in Table 1 below (from O.Reg. 278/05, sec. 26 (3). The number depends on the type of material and the size of the area.
Table 1 – Bulk Material Samples

<table>
<thead>
<tr>
<th>Item</th>
<th>Type of material</th>
<th>Size of area of homogenous material</th>
<th>Minimum number of bulk material samples to be collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Surfacing material, including without limitation material that is applied to surfaces by spraying, by towelling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on structural members</td>
<td>Less than 90 square metres</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>90 or more square metres, but less than 450 square metres</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>450 or more square metres</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Thermal insulation, except as described in item 3</td>
<td>Any size</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Thermal insulation patch</td>
<td>Less than 2 linear metres or 0.5 square metres</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Other material</td>
<td>Any size</td>
<td>3</td>
</tr>
</tbody>
</table>

c. Air Monitoring

Under the legislation air sampling is only required for Type III work.

Where asbestos air testing is required under the legislation, it will be conducted in accordance with the prescribed methods in the Regulations O.Reg 490/09 and O.Reg.278/05.

In case of an emergency, refer to the Emergency Response Plan (ERP): Appendix I: Asbestos Incident.

York University Asbestos Air Sampling Protocol

This protocol explains the process and the standards used by York University in determining the airborne asbestos concentration. The fundamental principle informing the protocol is the health and safety of the University community.

Air sampling is used to test for the concentration of airborne asbestos in and around the workplace. Air sampling often involves two steps: (a) capturing all air borne fibres of a certain size on a filter; and (b) a laboratory analysis of the fibre samples to determine the quantity and/or types of fibres.
1. **Air Sampling Methods for Asbestos:**

1.1 **Phase Contrast Microscopy (PCM)**

A pre-calibrated pump is used to draw in a steady amount of air through a filter, which collects airborne fibres. The filter is then sent to a laboratory and examined using phase contrast microscopy. This method counts all fibres (e.g., asbestos, cellulose, fiberglass etc.) and will not distinguish between fibre types. Results (expressed in the number of fibres per cubic centimeter of air) can be obtained in a few days. This technique is described in the O.Reg.278/05 for clearance air testing in Type 3 asbestos operations and in O.Reg. 490/09 for determining occupational exposure level.

1.2 **Transmission Electron Microscopy (TEM)**

TEM samples are collected in a similar manner to PCM. It uses higher magnification and can determine the types of asbestos fibres. This method is expensive and not widely available. Currently filter samples are sent to the United States for analysis. Results can be obtained in days or weeks. This technique is described in the O.Reg.278/05 for clearance air testing in Type 3 asbestos operations.

2. **Exposure Limits to Asbestos**

According to the Regulation respecting Asbestos (O.Reg.490/09), the time-weighted average exposure of a worker involved in certain asbestos work practices to any of the forms of airborne asbestos shall not exceed 0.1 fibres/cc of air.

(The Ontario Time-weighted average exposure for asbestos is identical to the Threshold Limit Value (TLV) enforced by the U.S. Occupational Safety and Health Administration. The TLV is defined as the average airborne concentration under which it is believed that nearly all workers may be repeatedly exposed, day after day, over a working lifetime, without adverse health effects.)

In the case of Type 3 asbestos operations, clearance air tests prescribed under the Regulation on Asbestos on Construction Projects and in Buildings and Repair Operations (O.Reg.278/05) must show a concentration of asbestos fibres in all samples collected which does not exceed 0.01 fibres/cc of air.

3. **Protocol:**

In accordance with the Occupational Health and Safety Act, every reasonable effort will be made to provide sufficient advance notice to relevant Joint Health and Safety Committee (JHSC) worker members or representatives of air testing in order to enable them to be present at the beginning of the testing.
3.1 Clearance Air Testing for Type 3 asbestos operation

York University will follow the detailed procedure as outlined in the regulation O.Reg.278/05 sec. 18(6)(1-7) using the PCM method.

As stated in the regulation, forced air will be used and at least 2,400 litres of air will be collected inside the enclosure. The number of samples to be collected will be in accordance to the regulation. If the area inside the enclosure fails the first test, the samples will be subjected to a second analysis using TEM. In such a circumstance, the work area inside the enclosure will be deemed to have “passed” the clearance air test only if every air sample collected has a concentration of asbestos fibres, which does not exceed the legislated limit of 0.01 f/cc of air.

If the work area inside the enclosure fails the clearance air test, the enclosure will remain in place. The inner surface of the enclosure and the work area inside the enclosure will be cleaned by a thorough washing or by vacuuming using a High Efficiency Particulate Air (HEPA) filter. Equipment and tools shall either be cleaned with a damp cloth or a HEPA vacuum or placed in a labeled dust tight container. Before another test is carried out, the work area will be visually inspected and allowed to dry.

Once the clearance air test has “passed,” the enclosure will be removed and the area will be clear for occupancy.

Within 24 hours after the clearance air testing results are received and, where relevant and practicable, in the morning before the start of classes, a copy of the results will be posted on the CSBO and HSEWB websites. A copy of the results will also be provided to the relevant JHSC or health and safety representative.

<table>
<thead>
<tr>
<th>Minimum number of air samples to be taken from each enclosure</th>
<th>Area of enclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>10 square metres or less</td>
</tr>
<tr>
<td>3</td>
<td>More than 10 but less than 500 square metres</td>
</tr>
<tr>
<td>5</td>
<td>500 square metres or more</td>
</tr>
</tbody>
</table>

3.2 Air testing for situations other than as prescribed for Type 3 asbestos operations

Although there are no legislative requirements to conduct air monitoring for work other than type 3, the University may conduct air monitoring after type 2 work involving maintenance and/or renovation work, depending on the nature and scope of the work.
Protocol

Air sampling will be undertaken using PCM in accordance with the Department of Occupational Health and Safety Protocol (Refer to I. Air Sampling Methods for Asbestos above).

For such testing, an “action” threshold of 0.05 fibre/cc will be used, as this concentration is 50% of the permissible occupational exposure level of 0.1 fibre/cc. If the test result indicates that total fibre concentration exceeds 0.05 f/cc, all work possibly disturbing asbestos will be stopped and the area will be thoroughly cleaned and retested. The area will continue to be re-cleaned and retested until the concentration of asbestos fibres is at or below 0.05 f/cc.

In the event that the initial PCM test shows a concentration of airborne fibers higher than 0.05 f/cc, the area will be evacuated and will be cleared for re-occupancy only once the concentration of airborne fibers is shown to be no greater than 0.05 f/cc.

Within 24 hours following receipt of air testing results and, where relevant and practicable, in the morning before the start of classes, a copy of the results will be posted on the CSBO and HSEWB website. In addition, a hard copy of the test results will be provided to the relevant JHSC or health and safety representative.

VIII ASBESTOS-RELATED WORK PROCEDURES

1. Asbestos-related Work Classification

Operations that may cause exposure of a worker to asbestos are classified by the Ontario Ministry of Labour, as Type 1, Type 2 or Type 3 Operations, with Type 1 Operation having the lowest risk. The definition for each of these types of operations can be found O. Reg. 278/05. In general, Type 1 Operations involve exposure potential with relatively low risk; Type 2 Operations involve significant exposure potential with some health risks; and Type 3 Operations involve high exposure with high risks.
Refer to Regulation 278/05 for Details

**Type 1 Asbestos Operation includes** (sec. 12 (2) O.Reg. 278/05)

- Installing or removing non-friable asbestos-containing material (ACM) or < 7.5 m² (82 sq.ft.) of ceiling tiles, without being broken, cut, drilled, abraded, ground, sanded or vibrated;
- Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if,
  - the material is wetted and
  - Using only non-powered hand-held tools
- Removal of < 1 m² (11 sq.ft.) dry wall with asbestos joint compounds.

**Type 2 Asbestos Operation** (sec. 12 (3) O.Reg. 278/05)

- Removing of all or part of a false ceiling with likelihood of ACM on top.
- Removing or disturbing ≤ 1 m² (11 sq.ft.) friable ACM.
- Enclosing friable ACM.
- Applying tape, sealant or other covering to pipe or boiler insulation with ACM.
- Removing or installing ≥ 7.5 m² (82 sq.ft.) ceiling tiles without being broken, cut, drilled, abraded, ground, sanded or vibrated.
- Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if,
  - the material is not wetted and using only non-powered hand-held tools, or
  - using power tools equipped with HEPA dust collector
- Removing ≥1 m² (11 sq.ft.) of drywall with joint asbestos compound
- Cleaning and removing filters used in air handling equipment in a building with sprayed fireproofing that is ACM
- Removing insulation with ACM using glove bag
- Any operations that may cause asbestos exposure and that is not classified as Type 1 or 3. This includes changing filters in HEPA vacuum.

**Type 3 Asbestos Operation** (sec. 12 (4) O.Reg. 278/05)

- Removing or disturbing > 1m² of friable ACM.
- Spray application of a sealant to friable ACM.
- Cleaning or removal of air handling equipment, including rigid ducting, in a building with friable sprayed asbestos.
- Repair, alteration or demolition of kiln or furnace or similar structure with ACM.
- Use of power tools (e.g., drill) with no HEPA dust collector on non-friable ACM.
- Repair, alteration or demolition of plant utilizing asbestos in process.
2. **General Asbestos Work Procedure at York University (including work permit)**

Note: For maintenance supervisors refer to CSBO Standard Operating Procedures to follow whenever taking on work in area designated to have asbestos and/or an actual asbestos removal project for Type 1 and 2 work (Type 3 work is done by contracted services).

Every effort will be made to conduct asbestos removal work while employees are not in the building. The procedure herein is to be followed for all asbestos related work at York University:

a. Work involving potential exposure to asbestos is identified and classified (see pg. 15) by CSBO supervisors.

b. A work permit is prepared by CSBO - includes the proposed method of work procedure and details regarding locations, work to be done, quantity, dates etc. (Appendix VI - Work Permit for Asbestos Related Work --- Sample). Along with the work permit CSBO completes updates on the observation report or the tracking form (see Appendix II for details).

c. CSBO forwards the work permit and observation report or tracking form to HSEWB for approval at least 24 hours prior to the anticipated start of work unless construction projects affect building occupants in which case the “Renovation and Construction Guide for Managers” should be followed i.e., 10 days advance notice.

d. HSEWB alters as necessary, approves, signs and attaches checklist. HSEWB will later update the HMIS Online Asbestos Database from observation report or tracking form provided by the CSBO supervisor.

e. The work permit is returned to CSBO. White copy is retained by HSWEB.

f. CSBO notifies the area manager of the proposed work. The form as shown in Appendix VIII - Notification of Project Approval/Implementation Form will be used if occupants are affected.

g. CSBO does work as described in the Work Permit following correct approved procedures.

h. Checklist (See appendix IV) completed during work procedure and retained by CSBO.

i. Exposure time of worker(s) involved in Type 2 work is entered into CSBO log and is used to later complete the Asbestos Work Reports when requested by HSWEB for submission to the MOL (see page 19: Asbestos Workers – Exposure Report).
3.  **Reporting Procedure for Unexpected Discovery of Asbestos**

As per Regulation 278/05 (Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations), sec. 7 (5), for any unexpected discovery of friable asbestos material during any work, the employer or constructor shall **forthwith** report the discovery, orally and in writing to the MOL inspector nearest the workplace.

**Reporting Procedure**

1. Worker/contractor reports discovery to supervisor or project coordinator or trades supervisor.

2. Supervisor stops any work that will disturb the friable material.

3. Supervisor makes arrangement for the collection of the bulk samples and delivers them to HSEWB for analysis.

4. Supervisor arranges for clean up and disposal of the waste (see section 4) of the work site by treating any friable material **as though it contained asbestos** and follows the appropriate asbestos procedure.

5. HSEWB reports the analysis report of the bulk sample to the supervisor.

6. If the sample contains asbestos, 
   (a) the supervisor forthwith notifies verbally,  
      i. a member of the respective JHSC(s), if York University employees are involved with work,
      ii. Ministry of Labour  
         Construction Program  
         5001 Yonge Street, Suite 1600  
         Toronto, Ontario  
         M7A 0A3  
         Attention: Program Assistant  
         Phone: 647-777-5005, Fax: 647-777-5012

   (b) provide a written report to the Ministry containing the information as required under O. Reg. 278/05, sec 8 (2)(a) to (f). Send copy to HSEWB and respective JHSC for inclusion in the file.

   (c) Supervisor and HSEWB retain copies of the verbal and the written report.

7. HSEWB and supervisor will revise the work classification where required in accordance with O.Reg. 278/05.
4. **Asbestos Clean Up and Disposal**

i **Area Clean Up:**

Prompt clean up must be conducted at the completion of asbestos related work, or to fallen/disturbed asbestos-containing material.

The clean up procedure includes:

Still wearing protective equipment,

1. Wet clean (e.g. by damp mopping or water mist spraying) inside of enclosure and contaminated area.
2. HEPA vacuum or wet wipes footwear, clothing, ladder etc. before leaving enclosure and work area,

ii **Personnel Clean Up:**

1. Hands and face to be wiped with wet towelling. Dispose of used towel as asbestos waste.
2. Remove protective clothing and dispose of the clothing as asbestos waste (refer to Disposal procedure below).
3. Respirator must be washed, wiped dry and inspected after each use.

iii **Asbestos Waste Disposal Procedure:**

<table>
<thead>
<tr>
<th>ACTION</th>
<th>RESPONSIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispose of all single use items as</td>
<td>Workers performing asbestos work</td>
</tr>
<tr>
<td>1. Asbestos Waste in six-ml polyethylene pre-labelled* (see below) bags available in CSBO Stores</td>
<td></td>
</tr>
<tr>
<td>2. Seal bags with tape.</td>
<td>Workers performing asbestos work</td>
</tr>
<tr>
<td>3. Clean the outside of the disposal bag. Insert into a second pre-labelled* bag.</td>
<td>Workers performing asbestos work</td>
</tr>
<tr>
<td>4. Loads waste onto truck and transports to dumpster located at Central Utilities</td>
<td>Workers performing asbestos work</td>
</tr>
</tbody>
</table>

Revised December 2014
Building or Glendon Parking Lot

5. Asbestos waste placed into dumpster and retained until dumpster is full.

6. When dumpster is full, contact licensed hauler to remove.
Complete shipping document (Section I) in duplicate (Appendix XI - Shipping Document for External Disposal of Asbestos Waste)

7. Distribute document to: Carrier and File

8. Retain file copies for 2 years.

*Pre-labelled asbestos bags have the following wording:

CONTAINS ASBESTOS FIBRES
Avoid Creating Dust and Spillage
Asbestos May be Harmful To Your Health
Wear Approved Protective Equipment

The words must be displayed in large, easily legible letters.

Transportation and Disposal: (Ref. EPA R.R.O. Reg.347 s.17)

5. Asbestos Workers - Exposure Report

In reference to sec.16 of O. Reg. 278/05, a worker performing a Type 2 (Type 3 is not done by York University employees) operation must complete an asbestos work report (Appendix VII - Asbestos Work Report Form) at least annually and immediately upon the termination of the employment. The report is to be sent by HSEWB to the Provincial Physician of Ontario.

The procedure for completing and sending the Asbestos Work Report Form is as follows:

1. Supervisors are required to keep a log of asbestos exposure hours for workers starting January 01, of each year, and for new employees, as soon as they become exposed (Employees will not be required to do asbestos work until they have been properly trained).

2. at the end of the year, HSEWB emails the form to the supervisors. The supervisors are to distribute the form and assist the workers in completing the form. Any departing employees (after January 01, of the year) will be required to prepare and submit a report prior to ending their work relationship.

Revised December 2014
the completed forms will be sent to HSEWB.

HSEWB will fax a copy to the Provincial Physician at the Ministry of Labour and keep a copy on file, which is available to the worker upon request. The supervisor provides a copy to the worker.

The Provincial Physician at the Ministry of Labour maintains an Asbestos Workers Register, which is updated with information on Asbestos Work Report Forms. On the recommendation of the Provincial Physician at the Ministry of Labour, a worker who is listed in the Asbestos Workers Register may volunteer to undergo a prescribed medical examination (Section 4(1) of Regulation 278/05).

IX PERSONAL PROTECTIVE EQUIPMENT

1. Respirator

   i Selection:

      - Respirators must be certified by the U.S. National Institute for Occupational Safety and Health (NIOSH) or the British Standards Institution.

      - Types of respirators (Table 2, O.Reg. 278/05):

         - Type 1 work: a non-powered, air purifying half-piece respirator.

         - Type 2 work: non-powered half-face, air purifying or full face piece respirator. Full face piece respirator required when entering ceiling space with sprayed on asbestos and if cutting friable materials (while dry) with a power tool equipped with a HEPA filter.

         - Type 3 work (not done by York University employees)

   ii Use:

      - Respirator should be assigned to a worker for the worker's exclusive use.

      - The supervisor assigns the respirator to the worker.
- Fit Testing:
  - Initial respirator must be fit tested by HSEWB using qualitative (irritant smoke) or quantitative (fit tester) before use and every two years thereafter. The details of the fit testing recorded by HSEWB
  - Workers must be trained by HSEWB on the procedure of seal check testing using the positive pressure test and the negative pressure test. A worker must demonstrate competence using this method. It will be used during subsequent uses of the respirator.

iii Care and Maintenance:
- HSEWB trains workers on the method of cleaning of respirators.
- Any damaged or deteriorated parts must be replaced prior to being used by a worker.
- Respirators must be cleaned after use on each shift by the workers.
- When the respirator is not in use, a worker must store it at a clean and sanitary location (e.g. in the clip-logged plastic bag provided by the manufacturer).
- If there are physical changes in the employee's face or if leakage is suspected, HSEWB will perform the fit testing on request.
- Cartridges should be changed when breathing resistance becomes excessive or if the cartridge shows any sign of physical damage, or annually when Worker Exposure Report is submitted.

iv Responsibility:
It is the responsibility of the supervisor to ensure training on the care, maintenance and fit testing of respirators is provided. It is the responsibility of the worker to perform fit tests and care as trained.

2. Protective Clothing

Disposable Tyvex coverall (with hood) must be worn when performing Type 2 (Type 3 is not performed by York Employees) Operations. It is optional for Type 1, but must be provided upon worker’s request.
X  EMERGENCY RESPONSE PROCEDURE

In case of an emergency, such as when asbestos is damaged or spilled from vibration, water damage, impact etc., Call HSEWB at 736-5491 or Security Control at 33333

As soon as HSEWB receives the call, the "Asbestos Incident Emergency Response Procedure" (Appendix I) will be activated.

XI  CONTRACTED SERVICES

1. York University uses contracted services for Type 3 Operations.

2. All contractors working at York University,

   (a) will be notified of the location of asbestos-containing materials, in writing, where they may encounter asbestos, as part of the Request For Proposal specification or where tenders are not sought as part of the agreement to perform work;

   (b) will be required to follow all procedures as outlined in the Designated Substances (O.Reg. 490/09) and the Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations - made under the OH&S Act (Ontario Regulation 278/05);

   (c) will be required to ensure no exposure to the York University Community to airborne asbestos;

   (d) must comply with York University standards regarding all asbestos procedures, and

   (e) must produce a work plan for Type 3 Operation regarding the procedure, type, location and date of operation. A copy of this report must be provided to HSEWB prior to start of work.

   (f) The contractor must produce a certificate indicating that every worker and supervisor involved in a Type 3 operation has successfully completed the Asbestos Abatement Worker Training Program approved by the Ministry of Training, Colleges and Universities. O. Reg. 278/05, s. 20.

3. CSBO or contractors must notify the MOL, Construction Health and Safety Branch, of all Type 3 Operations.
XII - HMIS Online Asbestos Database

York University through the HSEWB office maintains an online asbestos database developed by Pinchin Environmental for all buildings containing asbestos. Buildings prior to the mid 1980’s normally contain asbestos and buildings constructed after the mid 1980’s do not contain asbestos. This database is referred to as the Hazardous Materials Information System (HMIS) Online database for asbestos.

Written instructions for accessing the database and conducting various types of searches have given to supervisors and workers involved in disturbing asbestos (e.g. asbestos removal). To access the database users require a password and username. It is important that supervisors always check the asbestos database before conducting work that could potentially disturb asbestos. In the asbestos database there are different reports available including the assessment reports for each building which provides procedures to follow for various types of asbestos materials.

For more information contact HSEWEB at ext. 55491.
APPENDIX I: ASBESTOS INCIDENT – EMERGENCY RESPONSE

Rationale:

In the event of a release of asbestos materials, to protect the health and safety of members of the Community by preventing or reducing potential harmful exposure to airborne asbestos fibres.

Procedure:

1. Community member advises Security (SCC) or the Health, Safety and Well-Being Office (HSEWB).

2. Security or HSEWB obtains the following information:

<table>
<thead>
<tr>
<th>Name of caller:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of caller:</td>
</tr>
<tr>
<td>Location of incident:</td>
</tr>
<tr>
<td>Telephone #:</td>
</tr>
<tr>
<td>Supervisor in charge of area:</td>
</tr>
<tr>
<td>What happened? (description of incident)</td>
</tr>
<tr>
<td>Emergency Services required?</td>
</tr>
</tbody>
</table>

3. HSEWB checks Asbestos Inventory to confirm and identify type of asbestos present in area.

4. If inventory is negative: inform caller of the finding. Go to site to investigate concern. Conduct sampling if required or call CSBO for appropriate repair (ext 22401).

5. If inventory indicates positive presence of asbestos:

   5.1 Advise caller that HSEWB hygienist will attend immediately.

   5.2 Request caller to ensure all members of the Community leave the immediate area (room, floor, section of floor etc.). Isolate area with caution tape if applicable.

   5.3 HSEWB goes to site with Asbestos Response Kit

   5.4 At the site, the HSEWB hygienist assumes the role of On Scene Control Officer (OSCAR):

   - Clear area as appropriate using caution tape.
   - Inspect area
   - For spray fireproofing, if disturbance is significant arrange for rush air sampling (multiple samples at different distance from the asbestos location maybe required).
   - Close off area until results are received.
- Turn off or seal local ventilation.
- Collect bulk sample if appropriate (e.g. if ACM is damaged).
- Explain to occupants that asbestos is harmful only if airborne.
- Contact CSBO for clean-up (Type I or II procedure as appropriate) of the area.
  Follow asbestos procedure for repair or cleanup.
- File report.

6. Update Asbestos Inventory if applicable.

7. File report to:
   * senior area managers;
   * immediate area supervisor;
   * reporting employees;
   * relevant Joint Health and Safety Committee.
Asbestos Incident - Emergency Response Procedure for HSEWB

HSEWB receives call

Obtain the following information from the caller:
- Location of incident (building and room number)
- Caller’s name and location where he/she can be reached
- Supervisor’s name
- What happened?

Check Asbestos Inventory

Asbestos positive on inventory?

YES
- Call hygienist to initiate ERP

NO
- Reassure caller and conduct follow up as required
- Advise to contact CSBO for appropriate repair or cleaning
APPENDIX II – HSEWB ASBESTOS RESPONSE KIT CONTENTS:

Examples:

- Sample container
- Brush
- Flash light
- Scraper or putty knife
- Marker
- Booklet
- Caution tape
- Duct tape
- Mist bottle
- Gloves
- Tyvek suit
- Respirator with P100 cartridges
- Asbestos labelled yellow coloured bags

APPENDIX III – HSEWB ASBESTOS AIR SAMPLING KIT CONTENTS:

Examples:

- 2 pumps (labelled “asbestos”)
- 3 cartridges
- Rubber tubing
APPENDIX IV CHECKLISTS FOR ASBESTOS WORK PROCEDURE

CHECK LIST FOR TYPE 1 ASBESTOS WORK PROCEDURES

Date of Work: ______________ Start Time: ________________ Permit #: _____________

Location of Job: ________________________________________________________________

Name of Workers: ________________________________________________________________

PREPARATION OF THE WORK AREA

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N/AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Work Permit obtained from HSEWB.</td>
<td>□</td>
</tr>
<tr>
<td>2.</td>
<td>Community/Manager in work area notified of pending work (date and time frame).</td>
<td>□</td>
</tr>
<tr>
<td>3.</td>
<td>Clean visible dust, which may be disturbed (HEPA vacuum or wet).</td>
<td>□</td>
</tr>
<tr>
<td>4.</td>
<td>Control spread of dust (i.e. drop sheets).</td>
<td>□</td>
</tr>
<tr>
<td>5.</td>
<td>The product to be worked on is wetted to control dust unless wetting creates hazard.</td>
<td>□</td>
</tr>
<tr>
<td>6.</td>
<td>No eating, drinking, smoking or chewing in area.</td>
<td>□</td>
</tr>
<tr>
<td>7.</td>
<td>Provide non-powered respirator if requested by worker.</td>
<td>□</td>
</tr>
</tbody>
</table>

AT THE COMPLETION OF WORK PROCEDURE

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N/AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Clean area using HEPA vacuum or wet.</td>
<td>□</td>
</tr>
<tr>
<td>2.</td>
<td>Drop sheets:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- To be disposed: wetted and folded to contain dust</td>
<td>□</td>
</tr>
<tr>
<td>3.</td>
<td>Waste Disposal:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Dispose of waste and single use items in an Asbestos Waste labelled (6 mil) bag and seal bag with tape.</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>- Insert this bag into another asbestos waste labelled bag and seal with tape.</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Clean the outer bag.</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>- Place immediately in ASBESTOS WASTE DUMPSTER. Asbestos waste is not to be retained in work areas.</td>
<td>□</td>
</tr>
<tr>
<td>4.</td>
<td>HEPA vacuum or damp wipe footwear, clothing, ladder etc.</td>
<td>□</td>
</tr>
<tr>
<td>5.</td>
<td>Hands and face wiped with wet towelling before leaving.</td>
<td>□</td>
</tr>
</tbody>
</table>

Time of Completion: ______________________________

Completed by: ______________________________

Revised December 2014
CHECK LIST FOR TYPE 2 ASBESTOS WORK PROCEDURES

Date of Work: _______________ Start Time: _______________ Permit #: _____________

Location of Job: ___________________________________________________________________

Name of Workers: __________________________________________________________________

Preparation of the Work Area:

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Y</th>
<th>N/AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Work Permit obtained from HSEWB.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Community/Manager in work area notified of pending work (date and time frame).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Warning signs* posted in sufficient numbers (*indicating asbestos dust hazard and access to area is restricted to persons wearing protective clothing and equipment). See Appendix X for sign description.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Ventilation system serving the area disabled for work disturbing friable asbestos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Ventilation ducts sealed off for work disturbing friable asbestos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Enclosure:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Work area enclosed by walls or polyethylene (work involving false ceiling, or removing less than 1m² friable asbestos) if practicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Floor covered and taped beyond enclosure (6ml)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Overlap door constructed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Take water sprayer into enclosure.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Vacuuming:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- HEPA vacuum used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- One or 2 vacuum hoses inside of enclosure, depending on the size of the enclosure.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Friable material removed by vacuuming.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Personal Protective Equipment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Respirator fit checked.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Protective clothing worn.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Protective footwear (optional if slippery).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Wet any asbestos to be disturbed (unless wetting creates a hazard.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Eating, drinking, smoking or chewing are not allowed in the area.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Revised December 2014
AT THE COMPLETION OF WORK PROCEDURE:

1. Vacuum inside of enclosure (where applicable).

2. Vacuum footwear, clothing, ladder etc., before leaving enclosure and work area.

3. Wet clean (e.g. by damp mopping, or water mist spraying) inside enclosure and work area.

4. Waste Disposal:
   - Dispose of waste and single use items in an Asbestos Waste labelled (6 mil) bag and seal bag with tape.
   - Insert this bag into another asbestos waste labelled bag and seal with tape.
   - Clean the outer bag.
   - Place immediately in ASBESTOS WASTE DUMPSTER.
   Asbestos waste is not to be retained in work areas.

5. Hands and face wiped with wet towelling before leaving.

6. Warning signs are removed.

7. Respirator to be washed, wiped dry and inspected after each use.

Time of Completion: ________________________________________________

Completed by: _____________________________________________________

THIS CHECK LIST SUBSTANTIATES COMPLIANCE WITH THE REGULATION RESPECTING ASBESTOS ON CONSTRUCTION PROJECTS AND IN BUILDINGS AND REPAIR OPERATIONS - MADE UNDER THE OCCUPATIONAL HEALTH AND SAFETY ACT (Reg. 278/05) AND WILL SUBSTANTIATE EXPOSURE RECORDS OF WORKERS.
Appendix V
Glove Bag Procedure – (Sec. 17, O.Reg. 278/05)

Before work:

1. Using a glove bag is a Type 2 procedure. The variance (approval) from the MOL is not required.
2. Notify MOL when removing > 1 sq.m. (10.8 sq.ft.), Note: Area = length x diameter x 3.14.
3. Use an approved glove bag (available from CSBO Stores, e.g. Safety Strip).
4. Inspect the glove bag before using it and at regular intervals during use.
5. Do not use it if it is impossible to maintain a proper seal or if there is a possibility of the bag becoming damaged during its use (e.g. hot pipe temperature).
6. If damage is found stop work, wet the inside of the glove bag, place it in an asbestos waste bag (e.g. the yellow bags in CSBO Stores). Vacuum area with HEPA filter before continuing work.

Working procedure for removing pipe insulation at York University:

1. Worker wears respirator with P100 filters and TVEX suite
2. Separate work area by walls or barricades.
3. Disable ventilation and seal ducts serving work area.
4. Cover surfaces below work area with drop sheets.
5. When work is complete wet inside of the glove bag, remove air from the glove bag using HEPA filter.
6. Place the glove bag in an asbestos waste bag.
7. Wipe down pipe and seal with an encapsulant (available from CSBO Stores).
8. Clean work area by damp wiping or with HEPA vacuum.
# Appendix VI

## YORK UNIVERSITY

**Health, Safety and Employee Well-Being (HSEWB)**

**Work Permit/Notification #** 0802

**To Be Completed For Specific Work Undertaken At York University**

### 1. Location Of Work
- Building: [Name]
- Room No.: [Number]

### 2. Work To Be Completed By
- Campus Services & Business Operations (CSBO)

### 3. Date Of Work
- Start: [Date]
- End: [Date]

### 4. Date Of Application
- Time: [Time]

### 5. Project Coordinator/Supervisor
- Name: [Name]
- Ext.: [Extension]
- Dept.: [Department]
- Ext. No.: [Extension Number]

### 6. Employees Involved In Project
- Name: [Name]
- Ext.: [Extension]
- Dept.: [Department]
- Ext. No.: [Extension Number]

### 7. For Work Involving Asbestos
- All workers listed in Section 4 have been trained in asbestos in the last 2 years.
- All workers listed in Section 4 have been respirator/fit tested in the last 2 years.

### 8. Supervisor
- Name: [Name]
- Ext.: [Extension]
- Dept.: [Department]

### 9. Describe In Detail The Work To Be Completed

### 10. Will You Use Or Encounter Hazardous Substances Of Any Nature During The Performance Of This Project?
- Yes: [ ]
- No: [ ]

#### Example
- Lead
- Mercury
- Asbestos
- Coke Ovens/Smelting
- Vinyl Chloride
- Biohazardous Materials
- Other: [Specify]

### 11. For Each Hazardous Substance To Be Used/Encountered, Has/Has Not Been Obtained
- Personal Protective Equipment To Be Used/Procured To Department/Faculty?
- Yes: [ ]
- N/A: [ ]

### 12. In This Project, Will You Generate Any
- Mists
- Smoke
- Dusts
- Fumes
- Fibres
- Noise
- Vibration

### 13. If Yes, State How These Contaminants Will Be Produced

### 14. What Will Be Done To Control Or Mitigate?

### 15. Other Than The Workers On The Project, Who Else Will Be Affected?

### 16. Special Instructions/Recommendations

**The Occupational Health And Safety Implications Of The Task Described Have Been Evaluated And Approval Has Been Granted For Work To Proceed As Outlined:**
- Notified: [ ]
- Approved: [ ]

**Health, Safety And Employee Well-Being**

**Date**

---

1. White-Index
2. Yellow-Organizer
3. Manila-Combi Central File or pouch
APPENDIX VII

Ontario Ministry of Labour

Asbestos Work Report

This form is required under Section 21 of the Regulation for Asbestos on Construction Projects and in Buildings and Repair Operations. Provide one copy to the employee when complete.

Employer Information
Employer Operating Name

Employer Legal Name

Unit No. Street No. Street Name Street Type Street Direction Postal Code

PO Box City/Town Province Telephone No. ext. Fax No.

Employee Information
Last Name
First Name

Middle Name

Home Address
Unit No. Street No. Street Name Street Type Street Direction Rural Route

PO Box City/Town Province Postal Code Date of Birth (yyyy/mm/dd)

Hours of Work in Asbestos Type 2 or Type 3 Operations
Start Date (yyyy/mm/dd) End Date (yyyy/mm/dd)

Hours of Work Type 2

Hours of Work Type 3

Acknowledgement

I confirm that I am authorized to complete and submit this form.

I hereby certify that the information provided is true and correct to the best of my knowledge.

Last name of person completing this form
First name of person completing this form

Position

Date (yyyy/mm/dd)

Email Address

Notice of Indirect Collection of Personal Information

The information on this form is being provided by your Employer to the Provincial Physician at the Ministry of Labour to monitor your exposure to asbestos in the workplace. The personal information on this form is collected pursuant to the Occupational Health and Safety Act, O. Reg. 276/05, s.21(1)(a) Regulation for Asbestos on Construction Projects and in Buildings and Repair Operations. The collection of this information from your Employer is in compliance with s.38(1)(b) of the Freedom of Information and Protection of Privacy Act (FIPPA).

Questions about the Asbestos Workers Registry may be directed to the Provincial Physician:

Ministry of Labour
Health Care and Occupational Medicine Unit
505 University Ave., 15th Floor
Toronto ON MTA 1T7

Questions about privacy matters related to the collection, use and disclosure of personal information can be directed to:

Ministry of Labour
Freedom of Information and Privacy Office
400 University Ave., 10th Floor
Toronto ON MTA 1T7

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Revised December 2014
APPENDIX VIII

CAMPUS SERVICES AND BUSINESS OPERATIONS

Purpose

To outline the guidelines adopted by Campus Services and Business Operations regarding the timely notification of building occupants and facility users in the event that renovations or significant projects may affect work, teaching, research or other activities. The responsibilities of the various parties are defined in the Renovation and Construction Health & Safety Guide.

Local Area Contact Person __________________________________ Email ___________________________ SR/Work Order # ___________________________

Department __________________________________________ Project Location Atkinson College Basement

Project Description Stripping and sanding of existing wood flooring

Requested work is scheduled on/about 07/20/2007 to 07/30/2007

The contractor/Campus Services and Business Operations employees doing the work has been advised to take all reasonable precautions to minimize the disruption of normal activities and the risk to the health and safety of employees. The following causes of discomfort/inconvenience may occur:

<table>
<thead>
<tr>
<th>Discomfort/Inconvenience</th>
<th>Source(s)</th>
<th>Expected Duration</th>
<th>Precautions</th>
<th>MSDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fumes</td>
<td>Paints and other Finishes</td>
<td>07/20/2007 to 07/30/2007</td>
<td>Restricted access to site</td>
<td>Posted on site</td>
</tr>
<tr>
<td>Odours</td>
<td>Paints and other Finishes</td>
<td>07/20/2007 to 07/30/2007</td>
<td>Restricted access to site</td>
<td>Posted on site</td>
</tr>
</tbody>
</table>

For assistance in interpreting the Materials Safety Data Sheets (MSDS) please contact the Department of Occupational Health and Safety at extension 55491.

Staff Notification: (see Renovation and Construction Health & Safety Guide) The originating department is responsible for ensuring that all staff in the immediate vicinity of the project are advised of the project.

Project Contact __________________________ Date 07/23/2007

Telephone __________________________ Email __________________________

JHSC Email ____________________________
APPENDIX IX – INFORMATION ABOUT ASBESTOS

Most buildings in Canada built prior to mid 1980s, including certain York University facilities, contain asbestos in one form or another. Scientific knowledge to date indicates asbestos in its non-friable form (such as in floor tiles, ceiling tiles etc.) poses no danger unless it is being drilled, ground, broken or sanded. Friable asbestos (i.e., material that can be easily ground to dust between fingers), that is inhaled can be a health hazard. Asbestos can be safely managed by following procedure which prevents the release of friable asbestos.

York University has an Asbestos Management Program in place (http://www.yorku.ca/dohs/documents/AsbestosManagement.pdf) that fulfils the requirements of the current legislation. This program ensures that correct procedures are followed in the handling of asbestos and that every precaution is taken to reduce any potential exposure risk to the York University Community.

Friable asbestos material such as pipe insulation (in mechanical room accessible mainly to maintenance personnel) must not be touched or disturbed without strict safety measures. Asbestos used in decorative ceiling stucco, vinyl floor tile, dry wall joint compound, transite board, as found in some building units, is non-friable. However, it can become friable if disturbed. To prevent the risk of unnecessary exposure, please do not damage these structures or make alterations or repairs to your rental unit without notifying Housing Services (CSBO) or Capital Cost Accounting and Lease Administration (CSBO).


University residents, if you have questions about your apartment, please contact Housing Services, Campus Services and Business Operations.

Commercial tenants/leasees, if you have questions, please contact Capital Cost Accounting and Lease Administration, Campus Services and Business Operations
APPENDIX X - Signage

Example signage used during Asbestos Removal Type 2 Work

ASBESTOS DUST HAZARD. ACCESS TO WORK AREA IS RESTRICTED TO AUTHORIZED PERSONS WEARING PROTECTIVE CLOTHING AND EQUIPMENT.
<table>
<thead>
<tr>
<th>CONSIGNOR (GENERATOR)</th>
<th>CARRIER</th>
<th>CONSIGNEE (RECEIVER)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>Company Name</td>
<td>Company Name</td>
</tr>
<tr>
<td>Mailing Address</td>
<td>Address</td>
<td>Address</td>
</tr>
<tr>
<td>Shipping Site Address</td>
<td>City</td>
<td>Province Postal Code</td>
</tr>
<tr>
<td>City Province Postal Code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of authorized person Signature (print)</td>
<td>Name of authorized person Signature (print)</td>
<td>Name of authorized person Signature (print)</td>
</tr>
<tr>
<td>Date Tel. No.</td>
<td>Date Tel. No.</td>
<td>Date Tel. No.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shipping name of dangerous good (check one)</th>
<th>Asbestos</th>
<th>Primary Classification Product</th>
<th>Packing Group</th>
<th>Product Identification Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>white - chrysotile</td>
<td>9.1</td>
<td>III</td>
<td></td>
<td>UN2590</td>
</tr>
<tr>
<td>blue - crocidolite</td>
<td>9.1</td>
<td>I1</td>
<td></td>
<td>UN2212</td>
</tr>
<tr>
<td>brown - amosite</td>
<td>9.1</td>
<td>I1</td>
<td></td>
<td>UN2212</td>
</tr>
</tbody>
</table>

- Type & number of placards (IDOA placard is required if >5 kg.)
- Total mass/volume in metric tonnes

SPECIAL INSTRUCTIONS IN CASE OF SPILLAGE (must include a 24 hour emergency number of consignor)
Appendix XII

Request for Asbestos Sample Analysis

Sampled collected by:

_________________________  _____________________  _______________
Name                      Department                  Phone #

Date of sample collection: ______________________________

Sample location:

Building: ______________ Floor: ______ Room/location No.: ______________

Location name (e.g., office, washroom, closet etc.): ______________

Sample Description:

System (e.g., floor, ceiling, wall, piping, duct, mechanical equipment):

Component (e.g., drain, heating water supply, cold water, supply air duct etc.):

Material (e.g., terrazzo, plaster, masonry, concrete, parging cement, fiberglass):

Item (e.g., fitting, straight etc.):

Covering (e.g., canvas or n/a):

Access (e.g., all building occupants, maintenance with or without ladder, not accessible etc.):

Visible (yes, no, limited, e.g. if it is above a drop ceiling it would not be visible)

Condition (Good, Fair, Poor), Quantity (Square feet or linear feet, %):
Appendix XIII

CSBO Procedure for providing updates to HSEWB for asbestos removal

Procedure A below is the preferred method to follow. Procedure B can be used if the supervisor cannot access the HMIS Online asbestos database, provided that the room number of where work will occur is known.

Procedure A: Using the Observation Report from the Location Report (Preferred method):

1. Supervisor/coordinator prints the Observation Report (from the Location Report in the HMIS Online asbestos database) for the specific location where removal/repair occurs. The floor plan showing the location numbers may also need to be printed.

2. Supervisor/coordinator writes their name, work permit no., and date of work on the Observation Report.

3. Supervisor/coordinator writes the changes on the Observation Report that has occurred (to the system, components and materials, etc.) from the removal/repair operation.

4. Supervisor/coordinator returns the updated Observation report to HSEWB in order to update the HMIS Online database.

Procedure B: Asbestos Tracking Form (use only if the room number is known and the HMIS Online Asbestos Database is not available):

1. Supervisor/coordinator completes Part 1 and 2 of the Asbestos Removal Tracking Form.

2. Supervisor/coordinator writes the changes on the Asbestos Tracking Form that has occurred (to the system, components and materials, etc.) from the removal/repair operation.

3. Supervisor/coordinator returns the updated Asbestos Removal Tracking Form to HSEWB in order to update the HMIS Online database.

4. Bring, send or fax the HMIS Observation Report to Kinsmen Building, room 245 or Fax 416-650-8057 or ext. 58057. Note: reports with missing information will be sent back to the supervisor for completion.
Asbestos Removal Tracking Form

Use this form only if the room number is known and the HMIS Online Asbestos Database is not available.

Part 1:

Supervisor’s/Contractor Name: ________________________________________________

Date of work: ________________________________________________________________

Supervisor’s Signature: ________________________________________________________

Permit No.: _________________________________________________________________

Department: _________________________________________________________________

Extension: ________________________________________________________________

Part 2: Building No:______________ Building: ____________________________

Name:_________________________________Square Feet:___________________

Location No.___________ Location Name:______________________________

(e.g. lunch room, storage closet)

Floor:___________ Room No.________________________________________

Indicate on the table the asbestos containing materials to be removed or repaired.

<table>
<thead>
<tr>
<th>System</th>
<th>Component</th>
<th>Material</th>
<th>Item</th>
<th>Covering</th>
<th>Quantity</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example 1: Piping two</td>
<td>Heating Water Return</td>
<td>Magnesia Block</td>
<td>Hanger Support</td>
<td>N/A</td>
<td>2</td>
<td>LF (Linear Feet)</td>
</tr>
<tr>
<td>Example 2: Piping one</td>
<td>Chilled Water System</td>
<td>Parging Cement</td>
<td>Fitting</td>
<td>Canvas</td>
<td>15</td>
<td>N/A</td>
</tr>
<tr>
<td>Example 3: Ceiling</td>
<td>N/A</td>
<td>Lay in Ceiling Tile</td>
<td>N/A</td>
<td>N/A</td>
<td>80</td>
<td>SF (Square Feet)</td>
</tr>
</tbody>
</table>

Bring, send or fax this form to HSEWB, Kinsmen Building, room 245 or Fax 416-650-8057 or ext. 58057. Note: reports with missing information will be sent back to the supervisor for completion.