Friable Asbestos

An asbestos-containing material is friable if, when dry, it can be crumbled, pulverized, powdered by hand pressure, includes all asbestos material that is crumbled, pulverized or powered.

Non-friable Asbestos

Asbestos is known to be non-friable when it is bound by a chemical process or is mixed with another substance such as cement, polymer, resin or other material that under normal use, prevents it from being damaged and released into the air and environment. Non-friable asbestos is generally not a hazard unless it is drilled, cut, ground or crushed.

Standard Precautions for Working around Asbestos

The risk of asbestos exposure can be minimized if all workers, tenants, and contractors follow the basic rules. Some important points for working in areas that contain asbestos (even if it is not known) are:

- Never cut through pipes you suspect may be coated with asbestos insulation.
- Don’t sand or dry polish asbestos-containing floor tiles, or scrape them with sharp objects.
- Don’t use ordinary vacuum cleaners (non-HEPA) to pick up asbestos-contaminated waste.
- Don’t use ordinary vacuum cleaners (non-HEPA) to pick up asbestos debris if it is accidentally disturbed.
- Don’t sweep in asbestos-contaminated environments with brushes or brooms.
- Don’t remove ceiling tiles suspended below asbestos-containing materials sprayed above onto beams and support structures without appropriate training or protection.
- When in doubt, contact your supervisor.

Always notify your supervisor and your emergency contact person if you discover damaged asbestos or suspected asbestos containing material in your work area.

The health hazards associated with asbestos arise when the products containing asbestos are disturbed, causing the fibers to become airborne. Exposure to asbestos can cause latency diseases such as the fibrosis known as asbestosis and specific cancer known as mesothelioma, and other types of cancers.

Most educational institutions had well-developed asbestos management programs – inventories were complete and updated on a regular basis, trained work crews knew what to do and how to do it, and there was a long-term plan in place for repair and removal of asbestos, budgeted on an annual basis.

Asbestos in the Educational Workplace

Although asbestos use is heavily regulated, its presence in existing materials continues to present a serious hazard to workers who work in buildings built prior to 1990, including educational facilities workers performing maintenance, repair, renovation and demolition work.

Asbestos-containing products have an asbestos content exceeding 0.5 per cent (dry weight) asbestos. Regulation 278 does restrict the use of materials with over 0.1 per cent asbestos content in spray or thermal applications.
Facility owners are required to:

- Prepare and maintain, on the premises, an inventory of the location of all types of asbestos.
- Notify, in writing, all occupants of the building of the presence of asbestos in their area.
- Advise employers, contractors, and workers (contracted or employed by the owner) who may disturb or work in close proximity to asbestos of its presence.
- Implement and maintain a program to provide sufficient training for the workers noted above.
- Employers shall prepare and submit a Ministry of Labour Asbestos Work Report for every worker involved in Type 2 or Type 3 work (see below) at least every twelve months (Reg.278 Sec 16).

Where an Employer, Lessee or Tenant has been informed by the owner of a facility that asbestos is present in the workplace, the Employer, Lessee or Tenant must:

- Advise the workers of the presence of asbestos
- Implement and maintain a program to provide sufficient training to the workers who may disturb or work in close proximity to asbestos (Reg.278 Sec 5(2)).

There are three (3) Types of Asbestos Work Operations described in Reg.278 Sec 12 and are 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. The level of required control gets more stringent as we move from type 1 to type 3. Refer to the specific detailed requirements for each type in O. Reg 278/05.

**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 and bystanders. Example includes:

- 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. Examples include:

- Minor maintenance or repair work above false ceilings where sprayed asbestos fireproofing is present on beams.
- Minor removal means the removal of up to nine square feet (9 ft²) of wet friable material.
- For a length of pipe, minor removal must not exceed twenty-one linear feet (21 ft), even if less than nine square feet (9 ft²) of material is involved.

**TYPE 3 Operations**

Type 3 operations are generally large scale activities which generate significant airborne asbestos levels, may occur frequently, are of longer duration, and may pose a serious risk both to workers and to bystanders. Examples include:

- Major removal of friable asbestos during building renovations or before demolition.
- Major removal means the removal of more than nine square feet (9 ft²) of wet friable material in one shift, or
- The removal of more than twenty-one feet (21 ft) of linear pipe.

**Goal of the Asbestos Management Program**

Asbestos is a Designated Substance, governed by Ontario Regulations 490/09 and 278/05. The goal of the asbestos management program is to provide written direction for the organization in the event that asbestos is present in the environment. In establishing this program appropriate and specific to the facility, the owner can improve occupant asbestos hazard awareness, comply with the law, minimize asbestos disturbance, avoid unintentional business interruption, and organize maintenance or construction activities. Asbestos, when present, will always be a hazard. The severity of the hazard depends on how well the organization responds to managing it proactively.