

ASBESTOS

(See also Asbestos Exposure Control Plan)

The owner or the principal contractor must ensure that the WCB receives a Notice of Project at least 24 hours before beginning work on the following types of projects:

- Removing, encapsulating or enclosing friable asbestos building materials.
- Demolishing, dismantling or repairing any part of a structure or building in which insulating materials containing asbestos have been used or in which asbestos-containing products have been manufactured.

The notification must include:

- name and address of the principal contractor (if any) and the owner,
- address or location of the project,
- starting date and estimated duration of the project,
- a description of the project, including its size, estimated cost of labour and materials,
- detailed written work procedures which will be used to minimize the risk to workers who might be exposed to asbestos material.

NOTE: Notice of Project Asbestos (NOPA) Forms are available from the WCB. A copy of the completed form is to be posted at the job site.

Regulation

General Requirements

6.3 Exposure control plan

- (1) If a worker is or may be exposed to potentially harmful levels of asbestos, the employer must develop and implement an exposure control plan meeting the requirements of section 5.54.
- (2) To ensure adequate coordination of the overall plan, the employer must ensure that it is administered by a properly trained person.

What is Asbestos?

Asbestos is a naturally occurring material once used widely in the construction industry. Its strength, ability to withstand high temperatures, and resistance to many chemicals made it useful in hundreds of applications. However when asbestos is inhaled, it can be harmful and lead to the following diseases:

- asbestosis
- lung cancer
- mesothelioma (cancer of the lining of the chest and/or abdomen).



Asbestos Recognition

Asbestos is the generic name for a group of naturally occurring fibrous minerals. Asbestos colour may range from white to a pale yellow, green or blue. Asbestos fibres are very harmful to the lungs. They may cause lung scarring (asbestosis), lung lining scarring (pleural scarring), cancer of the lung lining (mesothelioma) and lung cancer.

Time lapse before the disease becomes evident may be 20-40 years. Workers who smoke have a 10-15 times greater risk of lung cancer from asbestos exposure than workers who do not smoke. The high strength, flexibility, heat and chemical resistance, and frictional properties of asbestos led to its widespread use in electrical insulation, high strength asbestos cement products, pipe covering, floor tiling and asphalt. A good measure of the hazard posed by asbestos is its friability - the ease with which it can be crumbled or pulverized. Products with "bound" asbestos do not pose a hazard unless they are cut, sawn, ground or sanded.

1. If workers unexpectedly discover a material they believe may be asbestos where they are working (e.g.: inside a pipe chase), they must alert their supervisor immediately.

The supervisor will take immediate actions including:

- alerting workers in the vicinity to the presence of the material,
- removing the workers from the environment where exposure may occur,
- restricting access to the area and posting warning notices,
- contacting an approved asbestos removal contractor to take a sample, and provide an assessment,
- where necessary, coordinating the removal or encapsulation of the asbestos
- filing a complete report with head office.
- 2. In circumstances where it is necessary that work continue in the hazard area, workers who may be affected by the presence of asbestos will be provided with written procedures and protective clothing and equipment, which must be used.

Note: To remove Asbestos a worker requires knowledge of the type of asbestos, knowledge of the proper choice and use of PPE and Respirators, understanding of containment procedures and knowledge of proper handling, storage and waste removal procedures. For type 3 removals, training is a legal requirement.

DO NOT REMOVE OR DISTURB ASBESTOS CONTAINING MATERIAL. IF YOU ARE INSTRUCTED TO DO SO, STOP WORK AND CONTACT YOUR SUPERVISOR. ONLY LOW RISK ABATEMENT ACTIVITIES WILL BE UNDERTAKEN. HIGH RISK ABATEMENT PROCEDURES WILL BE CONTRACTED OUT.

Asbestos "Low Risk" Work Activity Procedures

Low-risk work activities include working near undisturbed friable asbestos-containing materials. Another example is moving asbestos-containing waste material that is contained within a cleaned, sealed bag and then double-bagged involved in such activities should have some knowledge of the hazards of asbestos and the location of the materials. Supervisors must clearly identify all locations of asbestos containing materials, and ensure that all workers have been instructed in any work procedure restrictions needed to prevent contact with asbestos-containing materials.



Asbestos "Moderate-risk" Work Activities

Activities that carry a moderate risk of exposure to airborne asbestos fibres include:

- Using hand tools to cut, shape, drill, grind, or remove non-friable manufactured products containing asbestos, e.g., asbestos cement pipe
- Drilling (with wetting agents, or with local exhaust ventilation) through non-friable asbestos-containing materials
- Backing mounting screws out of asbestos cement products and removing the boards or tiles intact
- Buffing floor tiles with a coarse disc
- Collecting asbestos samples for laboratory analysis
- Analyzing samples of asbestos or asbestos-containing materials in a laboratory
- Removing any part of a false ceiling to gain access to a work area (for example, during inspection) when friable asbestos containing materials are, or are likely to be,
- lying on the surface of the false ceiling
- Removing drywall materials where joint-filling materials containing asbestos have been used
- Removing vinyl-asbestos floor coverings or other non-friable materials where the procedures do not create any friable waste
- Removing an entire piece of equipment or pipe with the asbestos-containing material remaining effectively intact ("wrap and cut" procedure)
- Demolishing a block wall (of cement, for instance) that has asbestos debris in its cavity
- Note: The amount of asbestos contamination found when the cavity is open may change the risk level to high.
- Dismantling a treated enclosure at completion of an asbestos removal project
- Setting up and removing a glove-bag apparatus for the removal of pipe insulation when the insulation is in good condition
- Using a prefabricated glove bag to remove asbestos insulation from piping systems
- Note While the area outside a glove bag is considered a moderate-risk area, the work activity inside a
 glove bag is considered high-risk; if a glove bag is torn or punctured, the risk level outside the bag
 automatically increases and the site-specific emergency procedures must be implemented.

Clean-up activities that carry a moderate risk of exposure to airborne asbestos fibres include:

- Using a HEPA-filter vacuum to clean ceiling tiles or light fixtures with light to moderate contamination
- Using a HEPA-filter vacuum to clean an area before setting up an enclosure
- Dismantling a treated enclosure at completion of an asbestos removal project
- Setting up and removing a glove-bag apparatus for the removal of pipe insulation when the insulation is in good condition
- Using a prefabricated glove bag to remove asbestos insulation from piping systems
- Note While the area outside a glove bag is considered a moderate-risk area, the work activity inside a
 glove bag is considered high-risk; if a glove bag is torn or punctured, the risk level outside the bag
 automatically increases and the site-specific emergency procedures must be implemented.



Asbestos "Moderate-risk" Procedures

Anyone involved in any moderate-risk work activity must follow written work procedures similar to those described here. To ensure that anyone in or near the work area is not exposed to airborne asbestos fibres, the following must be done:

- 1. Clearly mark the designated work area boundary by placing barricades, fences, or similar structures around the work area.
- 2. Place signs around the work area warning people not to enter the work area unless authorized to do so.
- 3. Wear appropriate protective clothing:
- 4. Wear a respirator fitted with a "100" (HEPA) filter.
- 5. Do not use compressed air to clean up or remove dust or materials from work surfaces or clothing.
- 6. Use polyethylene (poly) drop sheets and seal windows, doorways, and other openings to prevent the spread of asbestos dust to other work areas.
- 7. Before starting any work that is likely to disturb friable asbestos-containing materials on the surfaces of anything in the work area, clean up the friable materials by damp-wiping or using a vacuum cleaner equipped with a HEPA-filtered exhaust.
- 8. During the work, clean up dust and waste (wetted if possible) using a vacuum cleaner equipped with a HEPA-filtered exhaust, or by wet-sweeping or mopping.
- 9. Immediately upon finishing the work, complete the following tasks:
 - Wet drop sheets and barriers.
 - Fold them to contain any remaining dust.
 - Bag or place them in a sealable container.
 - Dispose of them as asbestos waste.
- 10. Before leaving the work area, complete the following tasks:
 - Clean protective equipment and clothing by damp-wiping or using a vacuum cleaner equipped with a HEPA-filtered exhaust before taking them outside the contaminated work area.
 - Leave any protective clothing worn in the work area in the designated storage area or facility for cleaning, or place disposable protective clothing in a sealable container and dispose of it as asbestos waste.
 - Launder non-disposable clothing
- 11. Place asbestos waste in a sealable container and label the container to identify its contents, hazard(s), and the necessary precautions for handling the waste materials. To prevent any interference with the work activity, do not allow containers of asbestos waste to accumulate in the work area. Remove containers from the work area at the end of each work shift, if not more often, and ensure that the containers remain under effective control if they are stored at the worksite before being disposed of.
- 12. Before removing asbestos waste containers from the work area, clean their external surfaces by wiping with a damp cloth or using a vacuum cleaner equipped with a HEPA filtered exhaust. Double bagging is a good practice.
- 13. After completing the work, provide the owner or employer occupying the area with documentation stating that it is safe for unprotected workers to re-enter the work area.



Asbestos Removal

The preceding and following procedures must be followed when determining if any materials on the demolition site contains asbestos:

- 1. The employer or contractor is responsible for determining if materials containing asbestos are present at the job site before work begins.
- 2. If asbestos materials are found, only trained and qualified workers must remove and dispose this material before any work begins.

If during work activities, materials are found to contain asbestos, all work must be stopped immediately and must be reported to the supervisor.

Refer to the list below showing possible locations of asbestos.

Exterior Surfaces

- Deck under sheeting
- Cement asbestos board siding & under sheeting
- Roof felt & shingles
- Window putty

Interior Surfaces

- Sprayed-on acoustical ceilings
- Acoustical tiles
- Textured paint
- Heat reflectors (woodstoves)

Appliances

- Refrigerators, freezers, portable dishwashers
- Toasters, slow-cookers
- Ovens, hair dryers (not shown) & portable heaters (not shown)

Electrical Equipment

- Lamp sockets
- Outlet and switchboxes
- Insulation on knob and tube wiring
- Recessed lighting
- Main panel and fuse boxes

Insulation

- Loose blown-in full insulation
- Batt insulation

Built-in Equipment

- Water heaters
- Range Hoods
- Clothes dryers
- Dishwashers

Flooring

- Heat source-covering
- Air duct-lining
- · Door and cover gaskets
- Pipe-lagging
- Wall gaskets and lining

Heaters & Piping

- Heat source-covering
- Air duct-lining
- Door and cover gaskets Pipe lagging
- Wall gaskets and lining

Miscellaneous

- Cat box aggregate (sand or clay)
- Fireplace logs
- Asbestos hot pads
- Asbestos gloves