

Appendix F Emergency Type 2 Work Procedures

The need to conduct asbestos removal on an emergency basis may arise from time to time. Examples of such unscheduled emergency work might include:

- the clean up of fallen or damaged asbestos-containing ceiling tiles as a result of a broken sprinkler line, etc.
- The emergency repair of any mechanical service lines (piping) or vessels currently insulated with asbestos.
- Entry into ceiling space (air plenum) to complete emergency repairs in any building which contain sprayed asbestos.

In such instances, it may be necessary for an employee of the University to perform Emergency Type 2 asbestos work. Should such an episode arise, the Measures and Procedures for Type 2 Operations outlined in O. Regulation 278/05 must be adhered to. Principle consideration shall also be given to the protection of the worker(s) performing the work while implementing additional precautions (i.e. additional wetting of the material prior to disturbance) so as to minimize the generation of airborne fibres.

- 1. Clear the area of all non-essential personnel.
- 2. Isolate the affected area by establishing a perimeter barricade (i.e. by placing a rope or tape barrier) or by closing all exits, windows, doors, etc. Post signage at all points of entry clearly identifying that there is an asbestos hazard and that the area is being temporarily off limits to all personnel not wearing protective clothing and equipment.
- 3. A wetting agent shall be added to water that is to be used to control the spread of dust and fibres.
- 4. Eating, drinking, chewing or smoking shall not be permitted in the work area.
- 5. Containers for dust and waste shall be,
 - i. Dust tight
 - ii. Suitable for the type of waste
 - iii. Impervious to asbestos
 - iv. Identified as asbestos waste
 - v. Cleaned with a damp cloth or a vacuum equipped with a HEPA filter immediately before being removed from the work area, and
 - vi. Removed from the workplace frequently and at regular intervals.
- 6. The employer shall provide every worker who will enter the work area with a NIOSH approved respirator and the worker shall wear and use the respirator. In practice, most operations require a half mask air purifying respirator with P100 filters. Contaminated ceiling entry and the use of HEPA filtered power tools require either a non-powered or powered full facepiece respirator with P100 or HEPA filters.
- 7. Protective clothing shall be provided by the employer and worn by every worker who enters the work area, and the protective clothing,
 - i. shall be made of a material that does not readily retain nor permit penetration of asbestos fibres,
 - ii. shall consist of head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing,
 - iii. shall include suitable footwear, and
 - iv. shall be repaired or replaced if torn.
- 8. Compressed air shall not be used to clean up and remove dust from any surface.
- 9. Only persons wearing protective clothing and equipment shall enter a work area where there is an asbestos dust hazard.

- 10. If the operation is a contaminated ceiling entry, the friable material that is likely to be disturbed shall be cleaned up and removed by using a vacuum equipped with a HEPA filter when access to the work area is obtained.
- 11. Before commencing work that is likely to disturb friable asbestos-containing material that is crumbled, pulverized or powdered and that is lying on any surface, the friable material shall be cleaned up and removed by damp wiping or by using a vacuum equipped with a HEPA filter. Note that this clean up can be performed without the need for an enclosure or tent.
- 12. Friable asbestos-containing material that is not crumbled, pulverized or powdered and that may be disturbed or removed during the work shall be thoroughly wetted before the work and kept wet during the work, unless wetting would create a hazard or cause damage.
- 13. The spread of dust from a work area shall be controlled by measures appropriate to the work to be done, including the use of drop sheets of polyethylene or other suitable material that is impervious to asbestos.
- 14. If the operation is contaminated ceiling entry or minor removal is carried on indoors (the only operations where an enclosure is mandatory) the spread of dust from the work area shall be prevented, if practicable, by,
 - i. using an enclosure of polyethylene or other suitable material that is impervious to asbestos (including, if the enclosure is opaque, one or more transparent window areas to allow observation of the entire work area from outside the enclosure), if the work area is not enclosed by walls,
 - ii. disabling the mechanical ventilation system serving the work area, and
 - iii. sealing the ventilation ducts to and from the work area.
- 15. Perform emergency repairs with minimum disturbance of asbestos.
- 16. Frequently and at regular intervals during the doing of the work and immediately on completion of the work,
 - i. dust and waste shall be cleaned up and removed using a vacuum equipped with a HEPA filter, or by damp mopping or wet sweeping, and placed in asbestos waste containers.
 - ii Drop sheets shall be wetted and placed in a container as described in paragraph 5.
- 17. Drop sheets shall not be reused.
- 18. After the work is completed, polyethylene sheeting and similar materials used for barriers and enclosures shall not be reused, but shall be wetted and placed in an asbestos waste container as soon as practicable after clean up of the work area.
- 19. After the work is completed, barriers and portable enclosures that will be reused shall be cleaned, by using a vacuum equipped with a HEPA filter or by damp wiping, as soon as practicable after clean up of the work area and disposal of temporary enclosures.
- 20. As workers are required to exit the controlled work area, each worker shall first wipe off or vacuum clean all protective gear and footwear. Disposable coveralls shall be removed prior to exiting the work area and the worker shall proceed to the pre-established wash area and wash up.
- 21. Notify the Department of Environmental Health and Safety of the need to have performed emergency work.
- 22. All waste materials and cleaning supplies will be disposed of through the Department of Environmental Health and Safety as contaminated waste.