

## **PROCEDURES FOR HANDLING OF ASBESTOS**

### **LARGE SCALE OPERATIONS**

#### **Asbestos Removal**

Workers engaged in removal and handling of asbestos especially if it is friable should take standard precaution to avoid potential health risks. The most important precautionary steps are to wear impermeable gloves, skin covering, eye protection and a high quality respirator. Entry to the working area should be restricted to persons wearing protective clothing and respiratory protection. This restriction should include all visitors.

Before asbestos removal, the USEPA recommends posting warning signs, providing removal workers with appropriate protective equipment and enclosing the work area through the use of plastic barriers to prevent contamination of other parts of the building. The use of a negative air pressure system in the room where removal is taking place, to ventilate the room and filter out asbestos fibres as air passes out through special filtering exhausts, is allowed. The exhaust ventilations should be sufficient to maintain a positive flow of air into the enclosure via the entrance. This should be confirmed by the use of smoke generator. Entry to the enclosure should be via a number of air locks (i.e. a series of at least three interlocking chambers) constructed of impervious sheet. These chambers allow for the change over from clean and contaminated clothing and other equipment. Contaminated clothing and equipment should be cleaned by vacuum cleaner inside the contaminated chamber of the air lock.

At a minimum, asbestos materials should be wetted with a water and surfactant (if possible) mixture sprayed in a fine mist. Time is allowed between sprayings for complete penetration of the material. All material to be removed should be thoroughly soaked, prior to removal as a 1<sup>o</sup> (primary) means of control of airborne fibres.

Asbestos, once removed must be containerized for transport and disposal. Recommended containers are 6-mil thick, plastic bags sealed to make them leak-tight. Minimize the void air space in the bags upon sealing, so as to reduce any fibre emissions should the bags burst under pressure. Double bagging, plastic-lined cardboard containers or plastic-lined metal containers provide more thorough containerization. The first and second set of bags should be colour coded to facilitate identification. Asbestos waste slurries can be packaged in leak-tight drums. Plastic linings used in the room should be removed and containerized also. Residual fibres on pipework should be removed by wet scraping and wire brushing. After that, all surfaces inside the enclosure should be vacuum cleaned using an approved vacuum cleaner. Asbestos debris may be vacuumed using a special vacuum cleaner and the areas should be washed down to remove any remaining fibres. In some cases where surface material is porous, spraying an encapsulating paint or polyvinylacetate on them will prevent

additional release of fibres. The area should then be inspected and if found satisfactory the enclosure should be dismantled and all used materials disposed of as toxic waste.

Asbestos should be disposed of in a facility designed to handle potentially hazardous wastes.

### **Small Scale Operations**

#### **Asbestos Removal**

Personal protective equipment should be worn wherever there is a risk of contamination of clothing or inhalation of fibres. Wherever possible all operations should be carried out “wet”.

The principles and procedures described for large scale operations are applicable but where necessary should be scaled down to meet the local situation.

In general, in circumstances where the use of water would unavoidably damage equipment or present a safety hazard, an alternative procedure would be to utilize a local exhaust ventilation and collection system designed to capture particulate asbestos released during the removal, or a glove bag system or a leak-tight wrapping which can contain the particulate asbestos.

#### **Asbestos Disposal**

All asbestos removed should remain adequately wet until it is collected and containerized in preparation for disposal.

All asbestos waste is regarded as a potential hazard and should be disposed of under strict supervision and procedures.

All containers should be labeled “DANGER – ASBESTOS – DO NOT INHALE DUST-HANDLE WITH CARE” and should be sealed.

Vehicles being used to transport the asbestos waste should also take care to have tyres and surfaces kept clear of loose fibres.

Disposal of all asbestos material should be at a facility designed to handle potentially hazardous waste. The facility must be approved and operated in accordance with established guidelines.

**PLEASE NOTE THAT ALL METHOD STATEMENTS DESIGNED TO KEEP THE RELEASE OF FIBRES TO A MINIMUM, WILL BE PREPARED FOR EMERGENCY WORK ON ASBESTOS-CONTAINING MATERIALS, AND WILL HAVE OBTAINED THE PRIOR APPROVAL OF THE RELEVANT AGENCY** *(excerpted from the National Environment And Planning Agency (NEPA) Proposed Asbestos Management Policy For Jamaica).*