Guidance for Structurally Unsound Buildings

Introduction

EPA's guidance has been requested on the demolition of structurally unsound buildings. Various federal regulations apply to building demolition activities. Areas of primary federal concern include asbestos demolition requirements, the proper disposal of electrical equipment containing PCBs (i.e., distribution transformers and capacitors) and storage tanks. EPA recognizes the difficult circumstances faced in demolishing structurally unsound buildings may make full compliance difficult. However, in any event, you should take the actions set forth below to the extent feasible.

Efforts to restore the damaged areas to their pre-disaster condition often involve removing or repairing damaged structures. There may be a natural tendency at this stage to overlook certain hazards, such as asbestos, that are not immediately life threatening. However, such hazards are serious and may manifest themselves many years from the time of exposure and should be taken into consideration. Given the health hazards associated with asbestos, PCBs, lead, and other harmful substances, it is reasonable that adequate measures be taken during emergency situations to minimize exposure to such materials from the demolition of buildings.

The following guidelines are provided to help minimize the health, safety and environmental risks associated with the demolition of structurally unsound buildings (structures that remain standing but are in danger of imminent collapse). In the case of such buildings it would be unsafe to enter or inspect a structure to determine the amount, types, and location of building materials containing asbestos, PCBs, lead, or other harmful substances. This guidance does not apply to the demolition of hurricane damaged but structurally sound buildings.

To the extent feasible, efforts should be made to perform the following steps:

Demolition

- In all instances, workers should use equipment specifically designed to protect them from asbestos exposures during demolition and handling of debris, especially respirators, as required under OSHA.

- Heavy equipment that is used to demolish structures or that is run over debris from the hurricane will rupture the building materials and may cause asbestos to be released. Therefore, it is very important to wet the structure before demolition and keep the structure wet during demolition. Wetting the structure is crucial because it reduces the potential for air migration of asbestos.

- EPA recommends knocking down each structure wall-by-wall, folding it in on itself to minimize excess breakage of asbestos containing material.

- Keep the debris wetted and covered until it is possible to consult with the asbestos trained person to segregate out asbestos containing material to the extent feasible. If asbestos is known to be present but can not be safely segregated, dispose of all the debris as if it is asbestos containing materials as discussed below.
Removal of Asbestos-Containing Material

- After you have collapsed the structure, if feasible, place the asbestos containing material into leak proof wrapping. If the volume of the material precludes use of leak proof wrapping, continue to wet the asbestos containing material and use heavy lifting equipment to place the asbestos containing material into waiting dump trucks. Whenever possible, use a plastic liner in the bottom of the bed of the dump truck to minimize the leakage of contaminated water from the dump truck. If the asbestos containing material has been further broken up during the loading process, wet it down again after you load it into the dump truck.

- Cover the dump truck with a tarp, sealing it so that debris and dust can not be released during transport.

- Placard (with a large sign) the dump trucks as they are being loaded and unloaded with asbestos-containing building materials. The placard should read:

“Warning: Asbestos Hazard. Stay Away”

Disposal of Asbestos Containing Material

- Truck the debris to a landfill allowed to receive asbestos. Contact state authorities for a list of asbestos approved landfills.

- Maintain your waste shipment records.

Source: https://www.epa.gov/natural-disasters/dealing-debris-and-damaged-buildings#buildings