

**Guidance for the Handling of Asbestos and Lead-Based Paint During
Storm and Natural Disaster Response and Clean-up Operations**

Introduction

Buildings damaged by tornados, flooding, and other natural disasters undergo demolition or renovation activity as a part of property clean-up and recovery operations. Buildings damaged beyond repair are generally demolished to clear the site while other reparable structures are cleaned and repaired to restore property use. Since these structures may contain asbestos and lead-based paint, the activity performed on the property will need to follow certain work practices and procedures to keep the work safe and regulation compliant.

Mississippi regulations for asbestos are listed under National Emission Standards for Hazardous Air Pollutants (NESHAP) and contained in 40 CFR sections 61.140 through 61.160. These regulations apply to most non-residential building demolitions and renovations. Individual residences are exempted from the regulations, but there are times when residential structures become regulated as with ordered demolitions and activity involving more than one structure on a site. Regulated or not, there are procedures that individuals should follow to keep conditions safe.

Requirements that address lead paint are set forth in Mississippi Lead-Based Paint Renovation, Repair, and Painting regulations. These regulations are not applicable to the removal of storm damage and debris, or with building demolitions. These regulations however do have applicability to repairs and renovations of housing and child-occupied facilities. As with asbestos, home owners doing their own work may not be regulated but should follow certain procedures to keep conditions safe.

The Occupational Safety and Health Administration (OSHA) may have applicable regulations for the protection of construction workers. Contractors should contact OSHA (601-965-4606) for any applicable worker protection requirements.

Copies of asbestos and lead-based paint regulations, project notification forms, certified individuals, and other information may be obtained by searching the options listed for asbestos and lead-based paint on the MDEQ web site.

Asbestos & Residential Structures

1. The asbestos NESHAP regulations do not apply to individual residences being demolished or renovated by the home owner. However, for health reasons home owners should protect themselves as much as possible against the inhalation of asbestos fibers which can be released from the demolition, renovation, and handling of structures and structure debris that contain asbestos.
2. Buildings constructed before 1970 are more likely to contain asbestos material. Some of the materials found in older buildings that may contain asbestos include: pipe and other insulation, ceiling tiles, exterior siding, roof shingles, and spray-on sound proofing. Be aware that asbestos may also be present in newer construction.
3. The risk of a fiber release comes from the disturbance of asbestos containing materials. By sufficiently wetting these materials and keeping them wet during all demolition, renovation, and handling activities, the homeowner can reduce the possibility of creating a fiber release and unsafe conditions. Asbestos containing materials should not be crushed, pulverized, abraded, grinded, sawed, or similarly disturbed.
4. Burning demolition of structures and/or burning of structure debris are prohibited.
5. A residential structure may become regulated under the asbestos NESHAP regulations when two or more residences on a site are affected by the demolition or renovation operation, and also when a residential structure becomes a part of an "installation" as with ordered demolitions involving groups of buildings and structures. Additional information for ordered demolitions is presented later in this document.
6. Home owners should also check the information available from the MDEQ web site to answer questions and may contact MDEQ's Asbestos Program (601-961-5171) for any needed assistance.

Asbestos & Commercial, Public, and Other Non-residential Buildings

The asbestos NESHAP regulations generally apply to any building or structure renovation or demolition operation that is not a single family residence or apartment building with four or less dwelling units. These regulations require pre-demolition/renovation inspection to determine the presence of asbestos and notification to MDEQ (except for renovations with de minimus amounts of asbestos). Asbestos materials must be abated following work practices and emission control procedures that require removal of the asbestos before any disturbance by demolition or renovation activity. Also, a NESHAP approved landfill must be used for the disposal of asbestos waste.

Clarifications and additional points of the regulations are presented in the information that follows:

1. Inspections performed to determine the presence of asbestos materials must be performed by individuals who have MDEQ asbestos abatement inspector certification.
2. The regulations specify that required demolition and renovation notifications be submitted ten working days prior to the commencement of the regulated demolition or renovation activity. The notification should include all information specified by the asbestos NESHAP regulations and be submitted to the MDEQ. A notification form is available to complete this task.
3. Individuals engaged for asbestos abatement (e.g., contractors, supervisors, workers, etc.) must have MDEQ asbestos abatement certification. The level or category of asbestos abatement certification needed will depend upon the individual's work function on the job.
4. The regulations specify asbestos emission control procedures that include: removal of regulated asbestos containing material (RACM) before demolition or renovation activity begins that would break up, dislodge, or similarly disturb the material; adequate wetting of RACM during removal and ensuring that the material remains wet until collected and contained, or treated for disposal; no visible emissions of asbestos from the work area; and on-site supervision by a NESHAP trained individual (e.g., MDEQ certified asbestos abatement supervisor) during any RACM removal activity.
5. A NESHAP approved landfill must be used for the disposal of asbestos containing waste material. The regulations also specify waste labeling and require manifest and recordkeeping of waste shipment. As indicated, asbestos-containing waste that originates from the demolition of nonresidential buildings or residential buildings with five or more dwelling units must be disposed of at a NESHAP approved landfill. A complete listing of NESHAP landfills can be found at: <http://www.deq.state.ms.us/solidwaste>

Asbestos & Demolition of Structurally Unsound Buildings

There may be instances when a building or structure is not safe to enter and perform building activity such as asbestos identification and removal. Buildings severely damaged by tornados, flooding, and other acts of nature may fall into this category and a government authority may be working to clear the damaged property. In such instances, *if the facility is being demolished under an order of a state or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse*, asbestos removal would not be required in advance of demolition activity. However, a notification of site information is required as well as alternative procedures for asbestos emission control including: wetting before and during demolition to reduce the potential for air migration of asbestos fibers; work practices to minimize excess breakage of asbestos materials during structure take-down and debris handling; on-site supervision of asbestos control procedures by a MDEQ certified asbestos abatement supervisor; and asbestos waste disposal in a NESHAP approved landfill.

Additional points and clarifications of the regulations are presented in the information that follows:

1. Damaged structures that remain standing but are in danger of imminent collapse are not safe to enter and inspect for the presence of asbestos. However, buildings constructed before 1970 are more likely to contain asbestos material. Some of the materials found in older buildings that may contain asbestos include: pipe and other insulation, ceiling tile, exterior siding, roof shingles, and spray-on sound proofing.
2. A demolition notification to MDEQ is required as early as possible before demolition begins, but not later than the day after beginning demolition activity. The notice will need to include all of the information specified in the asbestos NESHAP regulations and may be submitted using the notification form available from MDEQ.
3. At least one person trained in the provisions of the asbestos NESHAP regulations (e.g., MDEQ certified asbestos abatement supervisor) shall be on-site or available by cell phone and close proximity to the demolition site, to provide guidance and assistance.
4. All demolition workers should use equipment specifically designed to protect them from asbestos exposure during demolition and handling of debris, especially respirators as required by OSHA regulations.
5. Heavy equipment that is used to demolish structures or that is run over debris will rupture the building materials and may cause asbestos to be released. It is necessary 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.
6. In order to minimize excess breakage of asbestos containing material, the structure should be brought down wall-by-wall, folding the structure in on itself.
7. All demolition debris should be kept wetted and covered if not immediately loaded out to disposal. If asbestos is known to be present and can not be safely segregated, dispose of all the debris as if it is asbestos containing materials as discussed below.
8. After collapsing 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. When ever 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 is further broken up during the loading process, it should be wetted again after it is loaded into the dump truck.

9. The waste loaded into dump trucks should be covered with a tarp, sealing it so that debris and dust can not be released during transport.
10. During the loading and unloading of asbestos-containing materials, each waste hauling vehicle should have a placard reading: **“Danger Asbestos Dust Hazard, Cancer and Lung Disease Hazard, Authorized Personnel Only.”**

Lead Paint & Residential Structures

Residential property to be repaired and returned to residential use may be affected by the Mississippi Lead-based Paint Renovation, Repair, and Painting (RRP) regulations. This could be the typical scenario for homes that are damaged by natural disasters that do not sustain significant structural damage. The regulations will become applicable for the work of renovators and painters hired to make repairs and renovations to refurbish the home. If the house was built before 1978, and the renovation work disturbs enough old (lead) paint, the renovator must have Lead-based Paint Renovator certification from MDEQ and the work must be performed according to specified work practice standards.

The work practices that must be followed for regulated activity under the RRP regulations include the following:

1. Notification of the renovation to MDEQ prior to RRP work;
2. Occupant protection;
3. Posting of signs before the start of work;
4. Containment of the work area;
5. Comply with prohibitions and restrictions that include: open-flame burning or torching of lead paint; use of machines that remove lead paint with high speed operation such as sanding, grinding, power planing, needle gun, abrasive blasting, or sandblasting without HEPA exhaust controls; and heat gun operation at temperatures of 1100 degrees Fahrenheit and higher temperature.

Home owners who do the work themselves are not subject to the RRP regulations. Even so, they should take every precaution to minimize exposure to lead dust. Keep surfaces clean in the work area using disposable damp cloth or electro-static dust wipes, do not dry sweep dust on floors and walls, use wet mop, contain with plastic the area being renovated, use disposable clothing and respiratory protection, prevent transport of dust to other parts of the house, and place dust and debris in a leak tight container (such as garbage bags) or wrap in plastic for proper disposal.

In instances where an entire building is demolished and the building contains or is assumed to contain lead-based paint, MDEQ does not generally require sampling/characterization of the demolition wastes for the purpose of disposal. The demolition wastes may be disposed

of at an approved Class I rubbish site or municipal solid waste landfill. The generator of such demolition debris must notify the owner/operator of the receiving disposal facility that the waste contains or is assumed to contain lead-based paint.

Home owners may also dispose of their renovation waste at a Class 1 rubbish site or municipal solid waste landfill. This would be the waste generated by a home owner doing his own work.

Volunteer workers, who do not receive compensation for work, are not required to be certified, but should educate themselves about lead-safe work practices, so as not to inadvertently cause hazards for themselves or other family members.

Lead Paint & Non-Residential Structures

The only non-residential structures that may be affected by Mississippi lead paint regulations are what is referred to as child occupied facilities. A “Child-occupied facility”, as this term applies to renovations, means a building, or portion of a building, constructed before 1978, visited regularly by the same child, under 6 years of age, on at least two different days within any week (Sunday through Saturday period), provided that each day’s visit last at least 3 hours and the combined weekly visits last at least 6 hours, and the combined annual visits last at least 60 hours. Child-occupied facilities may include, but are not limited to, day care centers, preschools, and kindergarten classrooms. Child-occupied facilities may be located in target housing or in public or commercial buildings.

As with residential structures, the RRP work involving child-occupied facilities must be performed by a renovation firm and/or renovator with MDEQ certification and the same work practices that are required for residential structures apply.