

SECTION 10 - RESPONSE ACTIONS

AHERA requires that an accredited management planner recommend an appropriate response action for all areas of thermal system insulation (TSI) and friable ACBM remaining in the school. The final decision, on which action should be taken, however, rests with the LEA.

AHERA identifies five possible response actions for managing asbestos in schools, as listed below. Activities which create a high probability that ACBM will be damaged or weakened to such an extent that it would be rendered friable are also considered response actions. Small scale, short duration activities are not considered response actions.

- **OPERATIONS AND MAINTENANCE (O&M) PROGRAM** - This is a program of work practices designed to maintain friable ACBM in good condition and ensure cleanup of asbestos fibers previously released. An effective O&M program can prevent further release by minimizing and controlling friable ACBM disturbance or damage. An O&M program is not appropriate as an initial response action for any damaged or significantly damaged material.
- **REPAIR** - This involves returning damaged ACBM to an undamaged condition or to an intact state by replacing limited sections or patching damaged areas.
- **ENCAPSULATION** - This involves the treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers. The encapsulant either creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant). Both types of encapsulants are applied to the material surface using airless spray equipment at low pressure to reduce release of fibers during the application.
- **ENCLOSURE** - This involves creating an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air. The barrier is typically attached physically or sprayed on. For example, materials such as PVC or corrugated metal may be fastened around insulated piping, or a barrier may be constructed around asbestos fireproofing on structural members by spraying material that cures into a hard shell.
- **REMOVAL** - This involves the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area in a school building.

Under AHERA, the response action to be taken must be "sufficient to protect human health and the environment." Once it is determined which response actions meet these criteria, the LEA may choose the action that is the "least burdensome." ACBM is reassessed and recommended response actions reviewed every three years as part of the re-inspection process.

The LEA is required to implement an O&M program whenever any friable ACBM is present or assumed to be present in a building. Most of the friable asbestos has been abated in District buildings over the past twenty years. The asbestos containing material that remains is managed under the Operations and Maintenance Program, which is located in Section 7 of this Asbestos Management Plan, and removed in conjunction with planned renovations. District 91 also follows its O&M Plan for non friable asbestos and for assumed asbestos containing materials.

District 91 used only accredited AHERA Project Designers to design response actions for District buildings. When a removal (or other response action) is required, a design specification document is completed and submitted to accredited asbestos abatement companies as part of the bid package. The specification document contains the requirements of the project and must be followed throughout the abatement project. Upon completion of the response action, the design specifications, along with other response action documentation is maintained in an Abatement Project Manual.

Final clearance must be completed prior to an area being reoccupied after a response action to remove, encapsulate, or enclose ACBM or material assumed to be ACBM. Final clearance involves two steps: visual inspection and the collection and analysis of air samples.

VISUAL INSPECTION

A visual inspection involves visually examining the asbestos removal area for evidence that the abatement has been successfully completed, including thorough clean-up. The inspection should be conducted as rigorously as possible, with all spaces and surfaces where the abatement was conducted being extensively examined for residual ACBM debris.

The presence of any visible residue on surfaces within the abatement area indicates a need for additional cleaning of the surfaces. Only after visual inspection clearance has been completed may final air sampling be done. The results of the visual inspection shall be documented and signed by the person conducting the visual inspection. If an area passes visual inspection but then fails to meet air sampling and analysis requirements after that inspection, the site must be re-cleaned and an additional visual inspection be conducted to detect any material that may have been uncovered or released during re-cleaning.

FINAL AIR SAMPLING AND ANALYSIS

Section 763.90 of the AHERA Rule requires that the LEA accomplish final air sampling and

analysis of all removal, encapsulation, or enclosure projects by using the transmission electron microscopy (TEM) method, unless the project involves no more than 160 square feet or 260 linear feet of ACBM, in which case phase contrast microscopy (PCM) may be used. Note that no final air clearance is required for small-scale, short-duration O&M projects.

Sampling operations for airborne asbestos following an asbestos abatement action must be performed by qualified individuals completely independent of the abatement contractor to avoid possible conflict of interest. EPA recommends that the LEA obtain professional assistance to perform the sampling and analysis.

Response Action documentation is kept in an abatement project manual that is specific to the particular abatement activity. The following list is of the response actions conducted in the building since the inception of AHERA. Small scale short duration activities are also included on this list for completeness, even though they are not considered response actions. Abatement project manuals from past abatements are located in the Environmental Safety and Health Specialist's office, or in an archived location.

The list of past response actions is currently being compiled. Project manuals for past abatement activities are located in the office of:

Environmental Safety and Health Specialist

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