

SECTION 2 OUTLINE OF AHERA REQUIREMENTS

The following section is an outline form of the requirements of the AHERA standard. AOHS has conducted the required initial building inspections and sample collection, sample analysis, and developed the Management Plan which includes the Operations and Maintenance Program. There are now several areas that require the direct involvement of the Local Educational Agency (LEA).

In an effort to make more sense of this complex regulation, AOHS has delineated the different sections of the requirement which are now complied with and the areas where additional work is still needed.

In the following outline, these conditions will be denoted by either **AOHS** or **LEA** in the margin preceding the item of concern. This notation indicates if the work has been done, by AOHS, must still be done, by the LEA, or is the ongoing responsibility of the LEA to maintain. Some additional comments have been provided to clarify whether it is solely the responsibility of the LEA or if tools have been provided by AOHS to assist.

**U.S ENVIRONMENTAL PROTECTION AGENCY
ASBESTOS-CONTAINING MATERIALS IN SCHOOLS;
FINAL RULE AND NOTICE
TITLE 40 CFR PART 763
"AHERA"**

On October 22, 1986 President Reagan signed into law, a landmark measure amending the Toxic Substances Control Act (TSCA) to require school systems to identify and abate asbestos hazards in school buildings. The new law amends TSCA by adding a new Title II, the Asbestos Hazard Emergency Response Act of 1986 (AHERA).

AHERA required the U.S. Environmental Protection Agency (EPA) to develop regulations to reduce asbestos exposure in public and private elementary and secondary schools. The proposed regulation was published on April 30, 1987. The final rule was published on October 30, 1987 and became effective on December 14, 1987.

The following is an outline of the requirements of the rule, Asbestos-Containing Materials in Schools from 40 CFR Part 763, Subpart E.

Each section has been identified by the required action of the LEA and whether the action is provided by the consulting agreement with Applied Occupational Health Systems (AOHS) or must be provided by the LEA.

I. DEFINITIONS (Subsection 763.83)

The following outline contains some of the definitions contained in the standard. They are the principle definitions used throughout the course of implementation of the rule and for that reason are included here. All of the definitions can be found in the copy of the standard included in this binder.

- A. "Accessible" means that the ACM may be disturbed by school building occupant or custodial and maintenance personnel in the course of their normal activities.
- B. "Asbestos-containing material" (ACM) means any material or product which contains more than 1 percent asbestos.
- C. "Asbestos-containing building material" (ACBM) means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM found in or on interior structural members or other parts of a school building.
- D. "Friable" means that the material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. This includes non-friable material that has been damaged to the extent that when dry, it becomes friable.
- E. "Fiber release episode" means uncontrolled or unintentional disturbance of ACBM resulting in visible emission.

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- F. "Functional Space" is any room (s) or area designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.
- G. "Preventive Measures" means actions taken to reduce disturbance or the likelihood of damage to ACBM.
- H. "Response Action" means a method implemented to protect human health and the environment from friable ACBM
- I. The following definitions outline different levels of damage to ACM.
1. "Potential damage" exists when:
 - a. friable ACBM is in an area regularly used by any building occupants in the course of normal activities
 - b. there is a reasonable likelihood that the ACBM or its covering will become damaged due to factors including changes in building use and occupancy or recurrent damage
 2. "Potential significant damage" exists when, 1a and 1b exist and, the ACBM is subject to major or continuing disturbance due to factors such as accessibility.
 3. Physical assessments must be made of all ACBM and suspect ACBM and one of the following 7 assessments must be used.
 - a. Damaged or significantly damaged thermal system insulation ACM
 - b. Damaged friable surfacing ACM
 - c. Significantly damaged friable surfacing ACM
 - d. Damaged or significantly damaged friable miscellaneous ACM
 - e. ACBM with potential for damage
 - f. ACBM with potential for significant damage
 - g. Any remaining friable ACBM or friable suspected ACBM

II. Local Education Agency (LEA) Responsibilities (Subsection 763.84)

AOHS A. Ensure that all activities related to asbestos management and control are carried out in accordance with the regulation.

(Completed by AOHS; Must be implemented by LEA)

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LEA B. Ensure that the following people are properly trained:

- custodial and maintenance employees,
- person designated to ensure compliance with the requirements of this regulation

(Must be completed by LEA)

LEA C. Ensure that yearly notification is made to workers and building occupants, or their legal guardians, of inspections, response actions, post-response action activities, and periodic reinspection and surveillance activities.

(Must be completed by LEA using AOHS Form #3 with a written summary of activity)

LEA D. Ensure that short-term workers (telephone repair workers, utility workers, or exterminators, etc.) who may come in contact with asbestos are informed of the locations of ACBM and suspected ACBM.

(Must be completed by LEA using AOHS Form #7 in conjunction with management plan)

LEA E. Ensure that warning labels are attached immediately adjacent to any ACBM or suspected ACBM located in routine maintenance areas. Labels shall be prominently displayed and shall read as follows:

**CAUTION: ASBESTOS. HAZARDOUS
DO NOT DISTURB WITHOUT PROPER
TRAINING AND EQUIPMENT**

(Must be completed by LEA)

AOHSF. Ensure that management plans are available for inspection and that parents, employees, and other groups are notified of the management plan's availability.

(Plan completed by AOHS; LEA Must make available)

III. Inspection and Reinspections (Subsection 763.85)

AOHSA. LEA's shall have all school buildings inspected for friable and nonfriable ACBM by an accredited inspector before October 12, 1988. Buildings leased or acquired after October 12, 1988 for use as a school building must also be inspected.

(Completed by AOHS)

B. LEA's shall not be required to conduct inspections if they meet one of the exclusions outlined in Subsection 763.99 (refer to section XIII of this outline).

AOHSC. Inspections shall include: (Completed by AOHS)

- visual identification of suspected ACBM
- touching all suspected ACBM to determine friability
- identification of all homogeneous areas of suspect friable and nonfriable ACBM
- collection and submittal of bulk samples for analysis by an accredited laboratory
- assessment of condition of friable materials
- submittal of complete inspection record to person designated by LEA that includes:
 - inspection report
 - inventory of sampling areas, locations of bulk sampling, dates of sampling, and homogeneous areas where friable and nonfriable suspected ACBM is assumed to be ACM
 - description of sampling strategy
 - list of types of ACM
 - assessments of friability of ACM

LEA D. Reinspection of all school buildings with ACBM shall be conducted at least once every three years. Reinspections shall be conducted by an accredited inspector. They shall include components of the initial inspection and a new record shall be submitted.

(Must be completed by LEA)

IV. Sampling (Subsection 763.86) (Initial completed by AOHS)

When material is not assumed to be ACM, an accredited inspector shall collect samples from homogeneous areas as follows:

A. For Friable Surfacing Material

- at least 3 bulk samples for area \leq 1000 square feet
- at least 5 bulk samples for area $>$ 1000 square feet and \leq 5000 square feet
- at least 7 bulk samples for area $>$ 5000 square feet

B. For Thermal System Insulation

- at least 3 bulk samples from each area
- at least 1 bulk sample from patched areas < 6 linear or 6 square feet
- sufficient number from each insulated mechanical system to determine whether material is ACM

C. For Friable Miscellaneous Material

- sufficient number to determine whether material is ACM

D. For Non Friable Suspected ACBM

- sufficient number to determine whether material is ACBM

V. Analysis (Subsection 763.87) (Initial completed by AOHS)

- A. LEA's shall have bulk samples analyzed by laboratories accredited by the National Bureau of Standards (NBS). LEA's shall use laboratories which have received interim accreditation for polarized light microscopy (PLM) analysis under the EPA Interim Asbestos Bulk Sample Analysis Quality Assurance Program until the NBS PLM accreditation program is operational.
- B. Samples shall be analyzed by PLM using the Interim Method of the Determination of Asbestos in Bulk Insulation Samples (Appendix A of the regulation).
- C. A homogeneous area shall be considered not to contain ACM if the results of all samples show asbestos content \leq 1 percent.
- D. A homogeneous area shall be identified as containing ACM if at least one sample shows asbestos content $>$ 1 percent.

VI. Assessment (Subsection 763.88) (Initial completed by AOHS)

- A. A written assessment of all friable ACBM in a building shall be provided for each inspection.
- B. The ACBM shall be classified by type and extent of damage using the following categories:
 - 1. damaged or significantly damaged thermal system insulation
ACM
 - 2. damaged friable surfacing ACM
 - 3. significantly damaged friable surfacing ACM

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4. damaged or significantly damaged friable miscellaneous ACM
5. ACBM with potential for damage
6. ACBM with potential for significant damage
7. any remaining friable ACBM or friable suspected ACBM

C. Assessment may be based on the following considerations

- location and amount of material
- type, severity, and extent of damage
- accessibility
- material's potential for disturbance
- potential causes of damage or significant damage
- appropriate preventative measures

D. An accredited management planner shall review inspection and assessment results to recommend appropriate response actions

VII. Response Actions (Subsection 763.90)

LEA (Must be selected and completed by LEA)

A. Response actions shall be implemented in a timely manner consistent with the assessment results. The LEA is allowed to select the "least burdensome" method of implementing the recommended response actions. The least burdensome method allows the LEA to take into account financial resources, use of the buildings and system overhaul or replacement in planning the approach to implementing the response actions.

LEA B. The following steps shall be taken to determine whether the response action has been properly completed. (Must be completed by LEA)

1. visual inspection by LEA's designated competent person
2. use of aggressive sampling according to Appendix A of the regulation
3. analysis of air samples by laboratories accredited by NBS

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4. determination of completion based on the concentration of asbestos of 5 air samples taken within the functional space. Acceptable clearance levels are:
 - ≤ 0.01 f/cc [the limit of quantification for phase contrast microscopy(PCM)]
 - determination according to the Transmission Electron Microscopy (TEM) protocol in Appendix A of the regulation
- C. Until October 7, 1989, PCM may be used to analyze clearance air samples taken during the removal, encapsulation or enclosure of ≤ 3000 square feet or ≤ 1000 linear feet of ACBM.
- D. From October 8, 1989 to October 7, 1990, PCM may be used to analyze clearance air samples taken during the removal, encapsulation, or enclosure of ≤ 1500 square feet or ≤ 500 linear feet of ACBM.

VIII. Operations and Maintenance (Subsection 763.91)

(Plan completed by AOHS)

- A. LEA's shall implement an Operations and Maintenance (O & M) program whenever friable ACBM is present or assumed to be present.

(Must be implemented by LEA)

- B. The O & M program shall include:
 - application of worker protection requirements under 40 CFR 763.121. Requirements of "Worker Protection Rule" are extended to employees of LEA's who perform O & M activities.
 - initial cleaning using high efficiency particulate air (HEPA) vacuuming of wet methods and additional cleaning as needed.
 - restrict access to work area during O & M activities, post warning signs, shut off or modify HVAC system, and use work practices designed to confine fibers.

- LEA C. Accredited persons shall design and conduct response actions for jobs that are not small-scale, short-duration.

(Must be adhered to by LEA)

LEA D. When fiber release episodes occur, the following practices shall be followed:

(Must be implemented by LEA)

1. Minor Episodes (involving ≤ 3 square feet or ≤ 3 linear feet of friable ACM)

- saturate debris
- clean area
- place debris in leak-tight container
- repair damaged area

2. Major Episode (involving > 3 square feet of < 3 linear feet of friable ACM)

- post signs and restrict entry
- shut off or modify HVAC system
- response actions designed and conducted by accredited persons

IX. Training and Periodic Surveillance (Subsection 763.92)

LEA (Must be completed by LEA)

A. The LEA shall train all maintenance and custodial staff who work in a building containing ACBM before implementation of operations and maintenance provision. Training requirements are:

- 2 hours of awareness training for custodial and maintenance staff
- 14 additional hours of training that includes hands-on training for custodial and maintenance staff conducting activities resulting in disturbance of ACBM
- new custodial and maintenance employees shall be trained within 60 days after first day of employment

B. The LEA shall conduct periodic surveillance of ACBM in each school building every 6 months.

X. Management Plans (Subsection 763.93)

AOHSA. The LEA shall submit an asbestos management plan for each school to the Governor of their state on or before October 12, 1988.

(Completed by AOHS)

LEA B. The LEA shall begin implementation of its management plans on or before July 9, 1989.

(Must be completed by LEA)

LEA C. The LEA shall maintain and update each management plan to keep them current with ongoing operations and maintenance activities, periodic surveillance, inspection, reinspection, and response action activities.

(Must be completed by LEA using AOHS supplied forms)

AOHSD. The management plan shall be developed by an accredited management planner and shall include:

(Completed by AOHS)

1. For each inspection and reinspection conducted under this regulation:
 - date of inspection
 - blueprint, diagram, or written description of each school building identifying each sampling area
 - description of sampling strategy
 - sampling results
 - description of assessments of ACBM
 - recommendation made to LEA on necessary response actions
 - description of preventive measures and response actions to be taken
 - blueprint, diagram, or written description of ACBM that remains after response actions are taken
 - written plans for reinspection, operations and maintenance activities, and periodic surveillance
 - recommendation on the need for additional cleaning
 - description of employee/building occupant notifications

- evaluation of resources needed to complete response actions and conduct operations and maintenance activities, periodic surveillance, and training

XI. Record keeping (Subsection 763.94)

LEA (Must be completed by LEA using AOHS forms)

- A. Records shall be maintained, as part of the management plan, in the administrative office of both the school and the LEA.
- B. Records shall include:
 - detailed information on all preventive measures and response actions
 - air sampling locations and laboratory results
 - periodic surveillance reports
 - periodic cleaning reports
 - operations and maintenance activity reports
 - detailed information on major asbestos activity
 - fiber release episode reports

XII. Warning Labels (Subsection 763.95)

LEA (Must be completed by LEA)

- A. The LEA shall ensure that warning labels are attached immediately adjacent to any ACBM located in routine maintenance areas.
- B. The warning labels shall read:

**CAUTION: ASBESTOS. HAZARDOUS.
DO NOT DISTURB WITHOUT PROPER
TRAINING AND EQUIPMENT**

XIII. Exclusions

- A. An LEA shall not be required to perform on inspection in any sampling area of a school building where:
 - 1. An accredited inspector has determined that, based on sampling records, friable ACBM was identified in sampling area during an inspection conducted before December 14, 1987.

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2. An accredited inspector has determined that, based on sampling records, nonfriable ACBM was identified in sampling area during an inspection conducted before December 14, 1987.
3. An accredited inspector has determined that, based on sampling records, no ACBM is present in sampling area and that the area was sampled before December 14, 1987 and in a manner in compliance with the regulation.
4. Lead state agency responsible for asbestos inspection that has been granted a waiver has determined that, based on sampling records, no ACBM is present in sampling area and that the area was sampled before December 14, 1987 and in a manner in compliance with the regulation.
5. An accredited inspector has determined that, based on records of an inspection conducted before December 14, 1987, suspected ACBM identified in the sampling area is assumed to be ACM.
6. An accredited inspector has determined that, based on inspection records and contractor and clearance records, no ACBM is present in the sampling area where removal operations were conducted before December 14, 1987.
7. An accredited inspector or an architect or project engineer responsible for the construction of a new school building built after October 12, 1988, signs a statement that no ACBM was specified as a building material in the construction documents and no ACBM was used in the actual construction of the building.