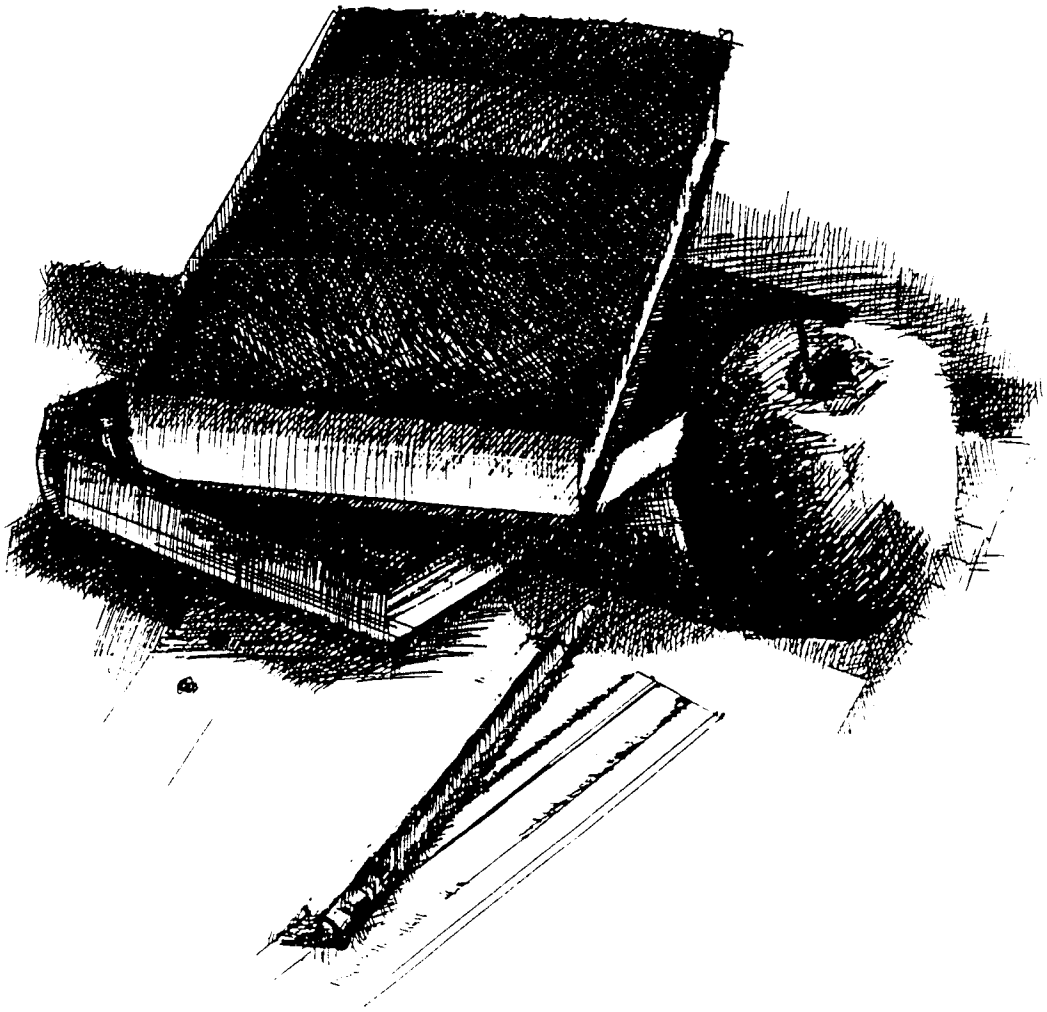
United States
Environmental Protection
Agency

Office of Pesticides
and Toxic Substances

July 1991

EPA

Asbestos in Schools: Evaluation of the Asbestos Hazard Emergency Response Act (AHERA): A Fact Sheet



Printed on Recycled Paper

AHERA EVALUATION FACT SHEET

FINDINGS AND IMPLICATIONS FOR SCHOOLS

The U.S. Environmental Protection Agency (EPA) recently completed an evaluation of the Asbestos Hazard Emergency Response Act (AHERA) regulatory program in schools. The evaluation focused on how well the schools implemented key aspects of AHERA and the factors that affected implementation. The evaluation fulfills a commitment to Congress to study the AHERA program to determine which elements of the statute, if any, could be used in a possible future program for public and commercial buildings. However, the sole purpose of this fact sheet is to inform schools of their initial AHERA successes, note areas for improvement, and provide additional guidance.

The evaluation was based on data gathered in a national statistical sample of 30 communities and 198 schools. Each school was visited and thoroughly reinspected. In-person interviews were conducted with each principal and AHERA-designated person. In addition, telephone interviews were held with the original AHERA inspector, the head of the PTA (or other active parent), and an active teacher in the school. In order to supplement the statistical data collected, focus group discussions were held in communities nationwide that were not associated with the original sample. Four focus groups were held with parents and teachers, and five others were held with school maintenance and custodial workers. The evaluation concentrated on six elements of AHERA: **school building reinspection, management plans, response actions, overall AHERA inspection reports, notification, and maintenance and custodial worker training.**

This fact sheet lists the key findings of the AHERA evaluation and provides some general follow up recommendations for schools. The fact sheet also provides "Know This!" sections that define terms which were identified by the Management Plan Evaluation as often misused. Information on materials which provided specific guidance to local education agencies (LEAs) on how to address possible deficiencies in the original inspection reports and management plans can be found at the end of this document.

SCHOOL BUILDING REINSPECTION

FINDINGS:

- An estimated 89 percent of the total quantity of suspect asbestos-containing building materials (ACBM) reinspected in the evaluation was identified in the original AHERA inspection.

- Eighty-two percent of the school buildings had at least one material unidentified. The suspect materials missed most frequently were fire doors, duct insulation, linoleum, and vibration dampening cloth in air ducts. Although wallboard was not a part of the survey, EPA believes this is another suspect ACBM that was often missed in the initial AHERA inspection.

- Only 56 percent of the areas where ACBM was identified had the exact location recorded in the management plan.

- Ninety-two percent of the ACBM which should have been assessed according to AHERA was actually assessed. Forty-four percent of the ACBM assessed used AHERA categories reporting the amount of damage at the time of inspection as well as the potential for damage.

WHAT THIS MEANS TO YOU:

The identification and location of suspect material is crucial to the management of asbestos. The upcoming three-year reinspection, required for all schools by July 9, 1992, is an opportunity for schools to have the original inspection report reviewed and corrected, should there be deficiencies in the identification and assessment of ACBM. Below are the steps EPA recommends to address possible deficiencies.

- The LEA designated person should review the inspection report and management plan carefully to determine if the categories of frequently missed materials were identified.

- You may want the inspector who performs the three-year reinspection to look for possible missed suspect material. Inspectors should make sure that materials such as ceiling tile, wallboard, plaster walls, linoleum, fire doors, duct insulation and vibration dampening cloth are identified and recorded in the management plan.

- The LEA designated person should review information on each material identified to ensure its specific location is recorded.

- The inspector should provide additional information about the location of previously identified ACBM if it is not included in the management plan.

KNOW THIS!

Suspect materials are generally divided into three broad categories:

1) thermal system insulation (TSI), such as pipe or boiler wrap;
2) surfacing materials, such as sprayed on ceiling materials or fireproofing; and
3) miscellaneous, which includes floor tiles and fire doors.

MANAGEMENT PLANS

FINDINGS:

- Management plans were generally complete. However, in many instances, the location of homogeneous areas was not clearly described and the material was insufficiently identified as TSI, surfacing materials, or miscellaneous.

- Plans, while generally complete, were not "user friendly" or easy to understand. Almost one quarter of the plans were difficult to follow without specialized instruction.

WHAT THIS MEANS TO YOU:

The management plan is the basis for all asbestos work done in the school and is a guide for anyone who could disturb the ACBM during maintenance or custodial work. It should be reviewed for clarity and usability and continually updated to reflect all asbestos activities.

KNOW THIS!

- Homogeneous Area: an area of surfacing material, TSI or miscellaneous material that is uniform in color and texture.
- Functional Space: a room, group of rooms, or homogeneous area designated by a person accredited to prepare Management Plans, design abatement projects, or conduct response actions.

RESPONSE ACTIONS

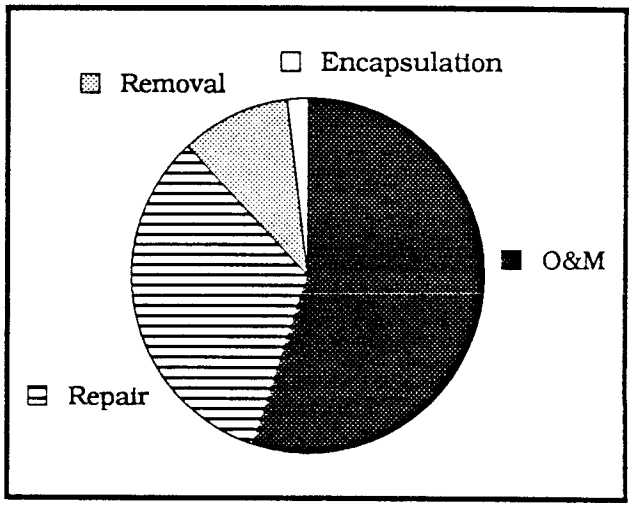
FINDINGS:

- Seventy-one percent of the management plans included recommendations for response actions such as operations and maintenance (O&M), repair, encapsulation, and removal; fifty-five percent of those recommendations called for O&M techniques while 10 percent called for removals.

- Asbestos was removed in 15 percent of the school buildings where response actions were completed.

- Ninety-eight percent of the recommended response actions were in accordance with AHERA guidelines. However, 80 percent of the buildings had recommendations that were considered generic because of a failure to specify exactly where the response action should be performed.

Plannned Response Actions



- The majority of prior remediations were judged to be adequate.

WHAT THIS MEANS TO YOU:

All friable ACBM should have an appropriate response action associated with it. To ensure your management plan has an appropriate response action, EPA recommends:

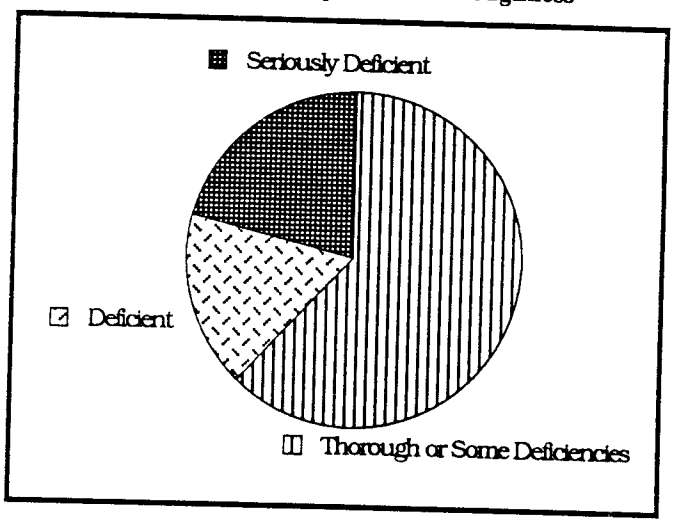
- The LEA designated person should check their management plan for a clear match between friable ACBM and recommended response action.
- If there appear to be deficiencies, an accredited management planner should review the inspection report and document recommended response actions.
- LEAs may want to address this when an accredited management planner reviews the reinspection report.

ORIGINAL AHERA INSPECTIONS

FINDINGS:

- Thirty-eight percent of the inspections were found to be either deficient or seriously deficient. The primary causes of deficient inspections were failure to identify all suspect material in a school, failure to clearly record the precise locations of ACBM, and failure to quantify it within acceptable standards of accuracy.

Level of School Inspection Thoroughness



WHAT THIS MEANS TO YOU:

It is important that school officials be aware of the asbestos (or suspect ACM) in their buildings and that the locations and amounts of ACBM are accurately recorded and marked. Without this information, a school cannot effectively manage its asbestos. Those who may come into direct contact with the material, such as custodians, maintenance personnel and short-term workers, may inadvertently disturb the material if they are unaware of its location.

Although only known or assumed ACBM is required to be reinspected in the triennial reinspections, EPA recommends schools take this opportunity to inspect for materials that may have been overlooked in the initial inspection (frequently missed materials are listed on this fact sheet under school building reinspection). It is also a good time for the inspector to correct deficiencies regarding unrecorded locations or unquantified amounts of ACBM.

NOTIFICATION PROCESS

FINDINGS:

- A survey of school principals showed that parents and teachers did not appear to overreact

upon learning about the presence of asbestos in their schools (overreacting can sometimes lead to improper or poorly conducted removals). In the focus group discussion, some parents and teachers did not recall receiving the notification.

WHAT THIS MEANS TO YOU:

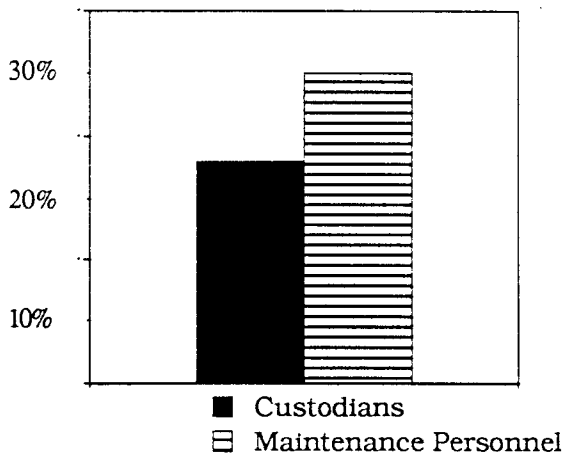
As required by AHERA, schools should continue to send the annual notifications including information on planned response actions and reinspections. Copies of notifications should be kept in your management plan.

MAINTENANCE & CUSTODIAL WORKER TRAINING & EXPERIENCE

FINDINGS:

- Eighty-seven percent of schools provided maintenance workers with asbestos-related training while 7 percent offered no training (approximately 6 percent do not have maintenance workers). Ninety-five percent of schools conducted classes that met the two-hour awareness training for custodial workers required by AHERA. Only 22 percent of schools that trained their maintenance workers provided 16 or more hours of training, as required by law, for those employees who may disturb asbestos.

Percent of Training Which Did Not Describe the Location of ACBM



- During maintenance-worker training, 25 percent of schools did not describe the locations of ACBM in their buildings. Classes for custodial workers included the locations in all but 18 percent of the schools.

- According to discussions with some custodial and maintenance workers, frequent unprotected and inappropriate work practices occur in schools. Often, workers did not perceive everyday tasks as disturbing asbestos, unless the asbestos was sawed, cut, or in some other way visibly damaged.

WHAT THIS MEANS TO YOU:

It is important that schools train custodial and maintenance workers appropriately. It is the LEA's responsibility to ensure that:

- all maintenance and custodial workers who work in school buildings with ACBM receive at least 2 hours of awareness training;

- specific locations of ACBM in each building are included in the two-hour training;

- all maintenance and custodial workers who may disturb ACBM receive an additional 14 hours of training;

- the 16-hour training includes hands-on training in the use of respiratory protection and good work practices; and

- newly hired custodial and maintenance workers are trained within 60 days.

GENERAL INFORMATION

LEAs need to be aware of these AHERA evaluation findings, build upon their successes, and work toward improving deficiencies. To assist the schools with this effort, EPA has available guidance materials and activities that address the concerns raised in the evaluation:

- EPA has published its Green Book, *Managing Asbestos In Place*, which has been mailed to schools. If you require an additional copy, call the EPA asbestos hotline at (202) 554-1404.

- Seminars on the Green Book's in-place management guidance were conducted for school officials around the country earlier this year.

- An AHERA questions-and-answers document was distributed late last month to help schools plan and conduct the three-year reinspections required by AHERA.

- EPA is now preparing model training materials, which should be available in autumn, for the 16-hour AHERA maintenance training requirement.

- The Agency is developing, with the National Institute of Building Sciences, an operations and maintenance manual for custodial and maintenance workers who come in contact with ACM. The manual, enlarging upon the Green Book's in-place management guidance, is scheduled to be completed by the end of 1991.

- EPA is revising the model accreditation plan which specifies training and certification requirements for asbestos control professionals working in schools.

- The Agency is also planning an AHERA self-study guide for school "designated persons" planned for spring 1992.

- Additional detailed guidance on how to conduct an AHERA reinspection is set for distribution later this year.

LEAs will be notified when the new guidance materials are available.

To obtain a report on the AHERA evaluation, or other asbestos guidance, contact the EPA asbestos hotline at (202) 554-1404.

July 1991