

WILSON MIDDLE SCHOOL

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Prepared by:



THREE-YEAR AHERA RE-INSPECTION REPORT

January 2015

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THREE-YEAR AHERA RE-INSPECTION REPORT

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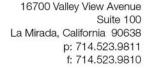


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January 15, 2015

Ken Smith
Director - FASO
GLENDALE UNIFIED SCHOOL DISTRICT
Facilities, Planning, Development
And Support Operations
349 W. Magnolia Ave
Glendale, California 91204

RE: 3-YEAR AHERA RE- INSPECTION FOR THE GLENDALE UNIFIEID SCHOOL DISTRICT – JANUARY 2015

Dear Mr. Smith:

Enclosed, please find copies of the 3-YEAR AHERA Re-Inspection of the **GLENDALE UNIFIED SCHOOL DISTRICT** performed by **ENCORP**. Attached is a summary report for those school sites that have items which our inspector determined to need immediate attention. Two complete copies of the final inspection report are included with this summary report. In addition, an individual site report is provided for each site location.

Please feel free to contact me at (714) 523-9811 if you have any questions, or need any further information.

Thank you.

Sincerely,

Alexander Blankevoort

Certified Asbestos Consultant #04-3555 Vice President of Operations, **ENCORP**

Enclosures: 1

EXECUTIVE SUMMARY

INTRODUCTION

ENCORP Environmental Management & Services was retained by the **GLENDALE UNIFIED SCHOOL DISTRICT** to conduct the **3-Year Asbestos Hazard Emergency Response Act (AHERA) Re-Inspection** of the District building facilities. The inspections were performed in compliance EPA Regulation 40 CFR 763, AHERA, "Asbestos in Schools Rule". The regulation requires that schools (K-12) be re-inspected and Surveillance / Inspection performed bi-annually for any changes in the condition of assumed and confirmed **Asbestos containing materials** (**ACM**). The inspections were conducted during the month of December 2014 and January 2015 following the schedule approval from the District. **ENCORP's** California Certified Asbestos Consultant/Certified Site Surveillance / Inspection Technician conducted the physical inspection of each site. The inspection reports and reviews were completed in January 2015.

SCOPE OF VISIT

ENCORP completed an assessment and inventory of identified and assumed asbestos containing building materials (ACBMs) within all the schools, special training facilities, and miscellaneous support facilities within the **GLENDALE UNIFIED SCHOOL DISTRICT**. The inspection consisted of a thorough review of all previous inspection reports, asbestos removal reports, and site plans, along with a visual inspection of all suspect materials at each site. Upon completion of each site inspection, the condition of all previously identified, and newly identified materials, was reviewed and reassessed. The following is a list of the school sites that were re-inspected in this assessment:

- 1. Balboa Elementary
- 2. Cerritos Elementary
- 3. Columbus Elementary
- 4. Dunsmore Elementary
- 5. Franklin Elementary
- 6. Fremont Elementary
- 7. Glenoaks Elementary
- 8. Jefferson Elementary
- 9. Keppel Elementary
- 10. La Crescenta Elementary
- 11. Lincoln Elementary
- 12. Mann Elementary
- 13. Marshall Elementary
- 14. Monte Vista Elementary
- 15. Mountain Avenue Elementary
- 16. Muir Elementary

- 17. R.D. White Elementary
- 18. Valley View Elementary
- 19. Verdugo Woodlands Elementary
- 20. Roosevelt Middle School
- 21. Rosemont Middle School
- 22. Toll Middle School
- 23. Wilson Middle School
- 24. Clark Magnet High School
- 25. Crescenta Valley High School
- 26. Daily High School
- 27. Glendale High School
- 28. Hoover High School
- 29. Administration Building
- 30. Facility & Support Operations
- 31. Pacific Avenue Education Center
- 32. Professional Development Center
- 33. Cloud Pre-School

Asbestos is a general term applied to a group of naturally occurring minerals which separate into fibers. This fibrous material (e.g., Amosite, Chrysotile, Crocidolite, Tremolite, anthophyllite, and Actinolite) is composed of silicates of aluminum, magnesium and other metals which are incombustible and very difficult to destroy or degrade. Asbestos has a tendency to break into a dust of tiny fibers which can float in the air and be inhaled or swallowed. Asbestos inhalation exposure has been shown to increase the risk of developing lung cancer, mesothelioma (cancer of the lining of the lung and/or abdomen.) and asbestosis (chronic lung disease). Exposure occurs by breathing asbestos fibers produced as a fine dust when asbestos is handled during fabrication, installation or removal. By definition ACM is any material or product which contains more than 1 percent (1%) asbestos.

ASBESTOS CONTAINING BUILDING MATERIAL (ACBM) CATEGORIES:

The EPA has identified that Asbestos Containing Materials (ACM) are found in buildings in the following three category forms:

- 1. Sprayed or trowled on materials: (surfacing material)
- 2. Mechanical insulation around hot or cold pipes, ducts, boilers, and tanks: (Thermal System Insulation/TSI)
- **3.** Variety of other products such as ceiling tile, floor tiles, sealants, and cement products (**miscellaneous materials**).

The first two types of asbestos pose the greatest risk of exposure if the asbestos becomes friable. Friable materials can be crumbled, pulverized, or reduced to powder by hand pressure. All of the materials mentioned above have the potential to become friable during renovation, installation, and maintenance activities.

Prudence dictates that whenever building materials which may contain asbestos are to be disturbed in a manner which is likely to produce dust, the materials should be checked to confirm the absence of asbestos. In no case should demolition or renovation projects be undertaken without first verifying that the materials involved do not contain asbestos

NON-FRIABLE AND FRIABLE ASBESTOS CONTAINING MATERIALS:

The U.S. Environmental Protection Agency (EPA) distinguishes between friable and non-friable forms of ACM. By definition ACM is any material or product which contains more than 1 percent (1%) asbestos (AHERA, OSHA definition), a Friable Asbestos Containing Material is any materials that contains more than 1% asbestos and can be "crumbled, pulverized, or reduced to powder by hand pressure when dry." It is generally understood, that Friable ACM is thought to release fibers into the air more readily, however, many types of non-friable ACM can also release fibers if disturbed.

Materials that are found to contain less than one (1) percent asbestos are considered asbestos containing construction materials (ACCM) by CAL/OSHA and are not regulated by the South Coast Air Quality Management District (SCAQMD). These materials are regulated through CAL/OSHA and should be removed by a California trained and licensed abatement contractor in accordance with all governing regulations.

DISTRICT RESPONSIBILITIES:

The District has the responsibility to eliminate or reduce occupational exposures to asbestos in accordance with all federal, state, and local laws as defined by regulatory agencies including, but not limited to, the following agencies and procedures"

- (a) 40 CFR 763.84 General local education agency responsibilities: Ensure that the activities of any persons, who perform inspections, re-inspections, and periodic Surveillance / Inspection, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance Title 40 CFR Part 763 Subpart E (AHERA).
- (b) Ensure that all custodial and maintenance employees are properly trained as required by this subpart E and other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable State regulations).
- (c) Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic re-inspection and Surveillance / Inspection activities that are planned or in progress.
- (d) Ensure that short-term workers/contractors (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM.
- (e) Ensure that warning labels are posted in accordance with Section 763.95.
- (f) Ensure that management plans are available for inspection and notification of such availability has been provided as specified in the management plan under Section 763.93(g).
- (g) Designate a person to ensure that requirements under this section are properly implemented. "Designated Person". Ensure that the designated person receives adequate training to perform duties assigned under this section. Such training shall provide, as necessary, basic knowledge of: Health effects of asbestos, detection, identification, and assessment of ACM.

TRADE EMPLOYEES & CUSTODIAL STAFF RESPONSIBILITIES:

- (a) Be responsible for identifying potential hazards in the work place to minimize health risk to themselves and other employees. Each employee shall make an effort to report any damaged building materials to the District management.
- (b) Any employee who works on asbestos or finds a problem with asbestos is to inform the Asbestos Designated Person and the site administrator.
- (c) Site administrators must contact the Asbestos Designated Person as soon as they are aware of any problems or projects which involve Asbestos Containing Materials or Presumed Asbestos Containing Materials.

ASBESTOS COORDINATOR RESPONSIBILITIES:

- (a) The District shall appoint an Asbestos Coordinator to be available for any questions or concerns involving asbestos on campus. Designated Person Title 40 Section 763.96 (e)(4).
- (b) Designated Person (DP) /Asbestos Program Manager should oversee compliance with regulations and procedures. The Designated Person shall be responsible in assuring that:
 - Inspections, re-inspections and periodic Surveillance / Inspection are conducted.
 - Management Plans (AMP) are developed and submitted to the office of Local Assistance and updated as conditions change.
 - Employees and student parents or guardians are informed yearly about status of the Asbestos Program.
 - Maintenance and custodial staff received required training
 - Temporary workers, including contractors and service personnel, are informed about asbestos.
 - Warning labels are posted near asbestos-containing materials in utility and maintenance areas.
 - Only accredited and state-certified persons are hired to inspect, to develop management plans, to design response actions and to carry out response actions.
 - The AHERA Inspections and Management Plans are available at all sites and are given to the staff or public upon request.
 - The Management Plans are implemented in a timely manner and in accord with what has been approved by the Office of the Local Assistance.
 - All records concerning asbestos are kept current.

ACBM ASSESSMENT CRITERIA:

<u>Damaged ACBM:</u> Material which has deteriorated, delaminated, water damage, lacks cohesion, is crumbling, gouged, marred heavily, abraded, or in any way has lost its structural integrity over more than 1% but less than 10% if the surface area If the damage is evenly distribute, or less than 25%, if the damage is localized in one area of the homogeneous area.

<u>Significantly Damage:</u> Material which has deteriorated, delaminated, water damage, lacks cohesion, is crumbling, gouged, marred heavily, abraded, or in any way has lost its structural integrity over 10% of the surface if evenly distributed on the surface or over 25% damage localized in one area of the homogeneous area.

Good Condition ACBM: ACBM with no visible damage or deterioration in less than 1% percent of the material and/or covering.

ACBM with the potential for Damage or Significant Damage: Circumstances in which:

- (a) Friable ACBM is in an area regularly used by building occupants, including maintenance workers, currently in intact (good) condition.
- (b) There is a reasonable likelihood that the material or its covering will become damage, deteriorated or delaminated due to factors such as changes in building use, changes in O & M practices, and changes in occupancy, or re-occurring activity.
- (c) Significant Damage The material is subject to major or continuing disturbance, due to factors, but not limited to accessibility or under circumstances, vibrations, or air erosion.

ENCORP'S PRIORITY RANKING CRITERIA:

Priority Color	Risk Ranking	Response Measure
HIGH RISK	 Friable or severely damaged asbestos-containing material (ACM), accessible to staff and students: Friable or severely damaged ACM in an air plenum: 	Immediate: Perform repairs and/or removal as soon as possible
MODERATE RISK	 Damaged but Non-Friable ACM, accessible to staff or students: Damaged Non-friable ACM in an air plenum: footage of area exposed to plenum. Severely damaged ACM: accessible to maintenance custodial personnel during maintenance activities: Boilers, Mechanical rooms Damaged Non-friable ACM: accessible to maintenance or custodial personnel during normal activities: 	Caution: Perform repairs and response action when feasible Continue periodic surveillance to re-assess conditions
LOW RISK	 Non-friable, non-damaged ACM: easily accessible to staff and students: potential of a major or continuing disturbance: footage of area. Non-friable, non-damaged ACM: accessible to staff and students: potential of a major or continuing disturbance: Friable or severely damaged, or damaged ACM in an area not normally entered and/or restricted access to staff (attics and crawl space): Non-friable, non-damaged ACM: accessible to maintenance and custodial personnel during normal activities: Non-friable, non-damaged ACM in an area none normally entered (attics and crawl space). Materials listed as "non-detect" in previous inspections, but records indicated not sampled adequately to qualify as non-asbestos. 	Continue periodic surveillance to re-assess conditions Apply O&M Procedures should plan disturbance occur

High Risk Areas: Areas where friable ACM or severely damage ACM materials are observed damaged and where areas pose an exposure risk to staff and students within the facility. Common response action will include immediate repair or removal by abatement procedures.

Moderate Risk Areas: Area where Non-friable ACM in damage conditions are observed. The material identified is damaged, but not in a friable state. Conditions may include cracking, loose, and/or missing floor/ceiling tiles. The condition may also include damage ACM that is or may become friable, but is not located in a regularly occupied area like a mechanical/boiler room, or attic/ceiling space. Common response actions may include continued periodic surveillance to review conditions of the material, followed by repairs and/or removal upon accessibility and/or repairs when it determined feasible by District staff.

Low risk: Areas where ACM's are found in good condition, and/or material in damaged conditions are located in inaccessible areas to staff. These areas pose a low risk of exposure but will require continued

periodic surveillance to re-access conditions. Any planned disturbance of these materials will require safe work practices under Operations & Maintenance (O&M) procedures.

RECOMMENDATIONS AND RESPONSE ACTIONS:

Newly identified and assumed ACBM's during the Surveillance / Inspection should be sampled and analyzed for their asbestos content prior to any demolition, renovation or disturbance of these materials. Materials analyzed for asbestos should be noted in the AHERA inventory and records of analysis maintained in the District and School Site AHERA inspection Binders.

Should damage materials be identified, damaged materials in the schools should be removed or repaired in order to insure the schools are in compliance with the AHERA regulation. Damaged ACBM's should be repaired or removed by a licensed abatement company and final clearance air testing performed in accordance with the AHERA regulations. It is the District's Policy that all asbestos related work be performed by a licensed asbestos abatement contractor. District personnel shall not remove or impact any asbestos containing materials.

AHERA regulations state that the response actions chosen for other than small scale/short duration repairs (less than 3 square or linear feet), must be designed and conducted by persons accredited to design and conduct response actions.

At a minimum, each member of the custodial/maintenance staff should have 2 hour asbestos awareness training. Each material listed as ACBM with Potential for Damage should be monitored for any changes in condition during the sixmonth periodic Surveillance / Inspection. These materials are currently intact and in good condition and should be included in the Operations & Maintenance Plan Protocols.

Based on the recommendations of the certified asbestos management planner, the Designated Person (DP) shall select the appropriate actions to deal with the existing asbestos-containing building materials. The DP must see to it that these actions are carried out in a timely manner and in compliance with the AHERA requirements.

Operations and Maintenance (O&M) Program -- This is a program of work practices designed to maintain ACBM in good condition and ensure clean-up of asbestos fibers previously released. An effective O & M program can prevent further release by minimizing and controlling ACBM disturbance or damage.

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 ACBM from a damaged area, a functional space, or a homogeneous area in a school building. Only accredited personnel can design the activity and conduct the removal, and only accredited laboratories can be used to perform final clearance air sample analyses to assure that the area is safe for building occupants.

AHERA NOTIFICATIONS:

The federal Asbestos Hazard Emergency Response Act (AHERA) requires all public and nonpublic elementary and secondary schools to ensure that all school employees and building occupants, or their legal guardians, are informed at least once each school year about all asbestos inspections, response actions, and post-response action activities, including triennial re-inspection and visual Surveillance / Inspection activities that are either planned or in progress. This notification must be made in writing and a copy maintained in the school's asbestos management plan. Notification methods may include the publication of an article in a school newsletter or through a separate written notice distributed to staff and sent home to a student's parent or legal guardian.

Public and nonpublic schools must also provide a written notification to all parent, teacher, and employee organizations of the availability of the school's AHERA inspections and asbestos management plan for public inspection. A description of the steps to notify these organizations, as well as a dated copy of the notification, is to be maintained in the asbestos plan. The asbestos management plans are to be made available for inspection to representatives of the federal Environmental Protection Agency and the State, the public, including parents, teachers, and other school personnel within five working days after receiving a request for its inspection.

ACBMs such as pipe insulation, boiler insulation, expansion joints, etc., within mechanical areas should be labeled with asbestos warning labels.

RESULTS OF SURVEY

The asbestos containing building materials (ACBMs) remaining within the ANAHEIM UNION HIGH SCHOOL DISTRICT are being professionally managed and controlled with available resources. The inventory reports provide an overview of the asbestos containing building materials, homogeneous areas where the materials are found, EPA asbestos containing material category, material friability, and an assessment of the observed conditions. Asbestos containing materials are still present within these facilities and an active Management Plan should remain in place until all asbestos containing materials have been removed.

CONCLUSIONS AND RECOMMENDATIONS

Visual assessment of asbestos containing building materials remaining within the **ANAHEIM UNION HIGH SCHOOL DISTRICT** revealed the school sites within the **DISTRICT** are well maintained. Specific information relative to individual facilities within the **ANAHEIM UNION HIGH SCHOOL DISTRICT** is outlined on the following pages.

AREAS WITHIN THE DISTRICT REQUIRING ATTENTION

ENCORP identified some asbestos containing materials that were found to be damaged during this inspection. The areas that require attention are identified for each affected school site within the Executive Summary.

SUMMARY OF 3-YEAR RE-INSPECTION:

Elementary Schools

Balboa Elementary School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities.

Cerritos Elementary School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities.

Columbus Elementary School

Asbestos Floor Materials

Damaged 9" Floor tiles in the Cafeteria Building were observed. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Surfacing Materials

Minor damaged on plaster materials were observed on walls of the cafeteria building. This material can become friable when damaged and should be repaired as soon as possible to prevent fiber further deterioration.

Miscellaneous Materials

Damage corrugated transite panels in building 1000 (Building 7), Building 2 Kitchen wall transite paneling behind the oven, and the furnace pad in the mechanical room of building 2 were observed damaged. These materials should be removed or repaired as soon as feasible to prevent fiber release into adjacent areas.

Dunsmore Elementary School

Miscellaneous Materials

The transite panel in Building 2 Kitchen wall transite paneling behind the oven was observed damaged. This material should be removed or repaired as soon as feasible to prevent fiber release into adjacent areas.

Franklin Elementary School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities

Freemont Elementary School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities

Fremont Elementary School

Miscellaneous Materials

Minor damaged is observed on the transite vent pipes of the Basement Heater closet of building 6 Cafeteria. This material should be removed or repaired as soon as feasible to prevent fiber release into adjacent areas.

Jefferson Elementary School

Miscellaneous Materials

The transite vent pipe in the basement heater room to roof was observed damaged. This material should be removed or repaired as soon as feasible to prevent fiber release into adjacent areas.

Glenoaks Elementary School

Miscellaneous Materials

The heating/vent tape of building 3 Heater closet was observed damaged. This material should be removed or repaired as soon as feasible to prevent fiber release into adjacent areas.

Keppel Elementary School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities

La Cresenta Elementary School

Asbestos Floor Materials

9" Floor tiles in Building 2 – Speech room/PTA Room were observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Lincoln Elementary School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities

Mann Elementary School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities

Marshall Elementary School

Asbestos Floor Materials

The Brown & red Battleship Linoleum – of room 4001 of Building 1 was observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Monte Vista Elementary School

Asbestos Floor Materials

The 9" Floor tile in building 1: Stage Storage Room and Cafeteria Hallway and Stage areas were observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Mountain Avenue Elementary School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities

Muir Elementary School

Asbestos Floor Materials

The floor tile at thresholds of the Cafeteria and kitchen of the Main Building were observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

R.D. White Elementary School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities

Valley View Elementary School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities

Verdugo Woodlands Elementary School

Asbestos Floor Materials

The floor tiles in Kitchen, storage room, and locker room were observed damaged. The floor tile in Portable room 8105 was also observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Middle Schools

Roosevelt Middle School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities.

Rosemont Middle School

Asbestos Floor Materials

The floor tiles in Room 6301 were observed damaged. The floor tile in the Gym Bldg. Boys and Girls Coaches office shower room were also observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Miscellaneous Materials

The ceiling tiles in Building 2 second floor were observed damaged. It is recommended that these tiles be replaced or repaired to prevent further damage.

Toll Middle School

Asbestos Floor Materials

The flooring linoleum on Bungalow classroom 3, the 9" floor tile in the custodian room and coaches' office of the Gym Locker Rooms, and the floor tile in the Shop classroom 5103 were observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic

Thermal System insulation (TSI)

The boiler insulation in the Gym Locker Room building was observed damaged. It is recommended that this material be replaced or repaired to prevent fiber release to adjacent areas.

Wilson Middle School

Asbestos Floor Materials

The floor tiles in the cafeteria building and Auditorium building were observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Thermal System insulation (TSI)

The aircell insulation materials were observed damaged in the Gym Buildings – Girls Boiler Room. It is recommended that this material be replaced or repaired to prevent fiber release to adjacent areas.

High Schools

Clark Magnet High School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities.

Crescenta Valley High School

Asbestos Floor Materials

The 9" Floor tiles in the hallway of building 1 & 2, room 2104, and shop classes and custodial rooms were observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Daily High School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities.

Glendale High School

Miscellaneous Materials

The transite panel located at the door of the Kiln in building $7 - 2^{nd}$ floor was observed damaged. This material should be repaired to prevent further deterioration and fiber release.

Thermal System insulation (TSI)

The boiler insulation in the bleachers boiler room was observed damaged. It is recommended that this material be replaced or repaired to prevent fiber release to adjacent areas.

Hoover High School

Asbestos Floor Materials

The 9" floor tile in Admin west elevator, the floor tile in rooms 205, 202, 201, 2015, 216, 218, 1301, 1302, 1303, 1314, 1315, 2301, 2302, 3302, Cafeteria custodian room, room 125, 104, 105, 103, 2nd & 3rd floor hallways of small gym, room 9205 have observed damaged floor tile. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Miscellaneous Materials

The transite panel located in the Kiln of the kiln house was observed damaged. This material should be repaired to prevent further deterioration and fiber release.

Thermal System insulation (TSI)

The pipe insulation in the Building 1 - 2nd floor fan room was observed damaged. It is recommended that this material be replaced or repaired to prevent fiber release to adjacent areas.

District Facilities

Administration Center

Asbestos Floor Materials

The floor tile in Building A: Electrical Rooms, Hallway, custodial room, Pantry, and stairwell were observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Facility & Support Operations (Maintenance & Operations Center)

Asbestos Floor Materials

The floor tile in the Administration Safe area was observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Miscellaneous Materials

The heating/vent tape of Region three HVAC was observed damaged. This material should be removed or repaired as soon as feasible to prevent fiber release into adjacent areas.

Pacific Avenue Education Center

Asbestos Floor Materials

The floor tile in Classroom 1, 2, 4, Classrooms 14, 15, 16, and Auditorium was observed damaged. It is recommended that these tiles and flooring material be replaced or repaired to prevent further damage and to prevent fiber release from abrasion of the exposed mastic.

Miscellaneous Materials

The transite panel located in the Kitchen and furnace pad of the Heater room in the Cafeteria is observed damaged. This material should be repaired to prevent further deterioration and fiber release.

Professional Development Center

The facility is currently undergoing construction. Areas should be re-assessed once construction is completed. Re-assess in 6-Month Periodic Surveillance.

Cloud Pre-School

The ACBM's listed have been observed in good condition. At this time no further response actions are required. The materials should continue to be monitored periodically on a bi-annual and every three year basis. Additional sampling and inspections should be warranted prior to demolition/renovation activities.

GENERAL NOTE

ALL SCHOOL SITES WITH WINDOW PUTTY:

The window putty around windows throughout the facility should be presumed as asbestos containing. The custodial personnel should be advised that all window putty should be treated as ACBM. The remaining window putty at all of the school sites should be removed and replaced with non-ACBM material as repairs are made.

TRACE AMOUNTS OF ASBESTOS (<1%)

Materials that are found to contain less than one (1) percent asbestos are considered asbestos containing construction materials (ACCM) by CAL/OSHA and are not regulated by the South Coast Air Quality Management District (SCAQMD). These materials are regulated through CAL/OSHA and should be removed by a California trained and licensed abatement contractor in accordance with all governing regulations. Waste generated from these materials is considered construction debris and is not regulated as hazardous or asbestos containing waste.

OPERATIONS & MAINTENANCE ACTIVITIES

Minor disturbance to ACCM such as coring or drilling can be performed by a certified trained contractor with a minimum of 16-hour AHERA Operations and Maintenance Training – Class III asbestos work classification. This work classification is used as an adequate alternative for trade work involving electrical, lighting, plumbing, and miscellaneous disturbances were work is not to exceed three (3) square feet (sq ft) per area and a one hundred (100) square feet (sq ft) total combined square footage. All activities involving work above T-Bar ceilings, including removal and or changing of panels, where ACM materials are found should be performed by 16-hour AHERA Operations and Maintenance Trained individuals under proper PPE. Until exposure assessments are determined all asbestos disturbance work is assumed to be above the OSHA Permissible Exposure Limits.

Due to the known dangers and health effects caused by exposure to airborne asbestos fibers, there exist both federal and state regulations and recommendations which must be followed during the asbestos removal process. The prequalified contractor must go to great efforts to: totally isolate the work area, provide proper personnel protection, completely clean the area, and properly dispose of all contaminated waste.

AHERA REGULATED ASBESTOS CONTAINING MATERIALS VS. ASBESTOS CONTAINING MATERIAL – GENERAL:

Under AHERA, asbestos-containing building materials (ACBM) in schools (Kindergarten through Grade 12) do not include materials installed outside of a building (e.g., roofing felt, siding, stucco, window putty). Likewise, under the Asbestos School Hazard Abatement Reauthorization Act (ASHARA), which applies to public and commercial buildings, the inspection of exterior ACBM is not required. ENCORP's 3-year AHERA inspection included suspected asbestos containing materials observed both in interiors and exterior of the facilities. AHERA inspection reports do not replace a complete asbestos inspection report for demolition purposes as required by the South Coast Air Quality Management District (SCAQMD). Should demolition or renovation work be performed, assumed materials should be sampled and a complete "Demo" style inspection report must be prepared.

No official consensus has been reached as to the most appropriate method for prioritizing asbestos hazards in the school. Asbestos risk management remains a subjective matter.

The method employed by the Certified Management Planner to prioritize potential asbestos hazards was derived from currently available resources and the experience of the Management Planning staff of ENCORP Environmental Services.

Additional asbestos containing materials may be present at these sites. Care should be taken when demolishing materials that will open wall cavities, sealed ceiling areas, or otherwise covered and inaccessible areas. If any additional known, assumed, or suspected asbestos-containing materials discovered during maintenance, renovation, remodeling or demolition activities, contact the District Designated Person(s) to determine the proper course of action.

Should you have any questions concerning this report, please contact me at (714) 523-9811. Thank you.

Respectfully submitted,

Alexander Blankevoort

Certified Asbestos Consultant #04-3555 Vice President of Operations, **ENCORP**



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Phone: (714) 523-9811 Fax: (714) 523-9810 www.encorp.net

3-YEAR AHERA RE-INSPECTION REPORT

District: GLENDALE UNIFIED SCHOOL DISTRICT

Date of Report: 6/3/2015

School: WOODROW WILSON MIDDLE SCHOOL Inspector: ROBERT CISNEROS

Site Code: 30-CC Inspection Date: 12/23/2014

			Percent		Recommended		
Building	Space or Rooms	ACM (Material)	Asbestos	Friability	Action	Comment	Priority
ADMINISTRATION BLDG BASEMENT	BOILER ROOM	TANK INSULATION				MATERIAL HAS BEEN ABATED	
ADMINISTRATION BLDG BASEMENT	BOILER ROOM/CRAWLSPACE	PIPING ELBOW MUD				MATERIAL HAS BEEN ABATED	
ADMINISTRATION BLDG BASEMENT	BOILER ROOM/CRAWLSPACE	PIPE INSULATION				MATERIAL HAS BEEN ABATED	
ADMINISTRATION BLDG LOWER LEVEL	ALL CLASSROOMS, COUNSELING OFFICE, HEALTH OFFICE & LOUNGE	9" BEIGE FLOOR TILE & MASTIC				MATERIAL HAS BEEN ABATED	
ADMINISTRATION BLDG LOWER LEVEL	ATTENDANCE OFFICE, ADMINISTRATION OFFICE AND ROOM 131	12" WHITE FLOOR TILE & MASTIC				MATERIAL HAS BEEN ABATED	
ADMINISTRATION BLDG LOWER LEVEL	BUILDING INTERIOR	PIPE COVERING				MATERIAL HAS BEEN ABATED	



3-YEAR AHERA RE-INSPECTION REPORT

District: GLENDALE UNIFIED SCHOOL DISTRICT

Date of Report: 6/3/2015

School: WOODROW WILSON MIDDLE SCHOOL Inspector: ROBERT CISNEROS

Site Code: 30-CC Inspection Date: 12/23/2014

D '11'	G	A CD F (D F (Percent	T. 1 1114	Recommended	G	
Building	Space or Rooms	ACM (Material)	Asbestos	Friability	Action	Comment	Priority
ADMINISTRATION BLDG LOWER LEVEL	BUILDING INTERIOR	PIPING ELBOW MUD				MATERIAL HAS BEEN ABATED	
ADMINISTRATION BLDG LOWER LEVEL	HALLWAY	9" TAN FLOOR TILE & MASTIC				MATERIAL HAS BEEN ABATED	
ADMINISTRATION BLDG UPPER LEVEL	CLASSROOMS 201-225 (EXCEPT 208J & 220J)	9" TAN FLOOR TILE & MASTIC				MATERIAL HAS BEEN ABATED	
ADMINISTRATION BLDG UPPER LEVEL	CUSTODIAN'S OFFICE, MEN'S RESTROOM AND WOMEN'S RESTROOM (219)	9" RED FLOOR TILE & MASTIC				MATERIAL HAS BEEN ABATED	
ADMINISTRATION BLDG UPPER LEVEL	HALLWAY	9" FLOOR TILE & MASTIC (VARIOUS COLORS)				MATERIAL HAS BEEN ABATED	
AUDITORIUM	BOYS' AND GIRLS' DRESSING ROOMS, TICKET OFFICE, CLASSROOMS 23 & 25 AND FOYER	9" FLOOR TILE & MASTIC	ASSUMED	NON	REPAIR DAMAGED MATERIAL AND O&M PROGRAM	MATERIAL DAMAGED IN S/E LOBBY OFFICE, STORAGE ROOM AND IN ROOMS A & B OF ROOM 408	3



3-YEAR AHERA RE-INSPECTION REPORT

District: GLENDALE UNIFIED SCHOOL DISTRICT

Date of Report: 6/3/2015

Inspection Date: 12/23/2014

School: WOODROW WILSON MIDDLE SCHOOL

Inspector: ROBERT CISNEROS

Building	Space or Rooms	ACM (Material)	Percent Asbestos	Friability	Recommended	Comment	Priority
AUDITORIUM	BUILDING INTERIOR	PIPING ELBOW MUD	ASSUMED	LOW	O & M PROGRAM	MATERIAL INTACT, BELOW DROP DOWN CEILING	8
AUDITORIUM	FAN ROOM	EXPANSION JOINT				MATERIAL HAS BEEN ABATED	
AUDITORIUM	FAN ROOM	PIPING ELBOW MUD				MATERIAL HAS BEEN ABATED	
AUDITORIUM	FAN ROOM	PIPE COVERING				MATERIAL HAS BEEN ABATED	
AUDITORIUM	LOBBY, HALLWAYS & CLASSROOMS 4101 & 4107	12" FLOOR TILE & MASTIC	ASSUMED	NON	REPAIR DAMAGED MATERIAL AND O&M PROGRAM	MATERIAL DAMAGED IN HALLWAY	3
AUDITORIUM	MAIN ROOM (FOYER)	1' x 2' WHITE CEILING TILE				MATERIAL HAS BEEN ABATED	



3-YEAR AHERA RE-INSPECTION REPORT

District: GLENDALE UNIFIED SCHOOL DISTRICT

Date of Report: 6/3/2015

Inspection Date: 12/23/2014

School: WOODROW WILSON MIDDLE SCHOOL

Inspector: ROBERT CISNEROS

			Percent		Recommended		
Building	Space or Rooms	ACM (Material)	Asbestos	Friability	Action	Comment	Priority
AUDITORIUM	ROOM 24 - STORAGE	EXPANSION JOINT	ASSUMED	NON	O & M PROGRAM	MATERIAL INTACT	8
CAFETERIA	BOILER ROOM (ROOM 5103)	AIRCELL INSULATION				MATERIAL HAS BEEN ABATED	
CAFETERIA	BOILER ROOM (ROOM 5103)	EXPANSION JOINT	ASSUMED	LOW	O & M PROGRAM	MATERIAL INTACT	8
CAFETERIA	BOILER ROOM (ROOM 5103)	TSI- TANK INSULATION				MATERIAL HAS BEEN ABATED	
CAFETERIA	BOILER ROOM (ROOM 5103)	TSI - PIPING ELBOW MUD				MATERIAL HAS BEEN ABATED	
CAFETERIA	BOILER ROOM (ROOM 704)	TRANSITE VENT PIPE	ASSUMED	NON	O & M PROGRAM	MATERIAL INTACT	8

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3-YEAR AHERA RE-INSPECTION REPORT

District: GLENDALE UNIFIED SCHOOL DISTRICT

Date of Report: 6/3/2015

Inspection Date: 12/23/2014

School: WOODROW WILSON MIDDLE SCHOOL

Inspector: ROBERT CISNEROS

			Percent		Recommended		
Building	Space or Rooms	ACM (Material)	Asbestos	Friability	Action	Comment	Priority
CAFETERIA	CAFETERIA, SNACK BAR, STAFF DINING, KITCHEN OFFICE AND LOCKER ROOM	9" TAN FLOOR TILE & MASTIC	3% CHRYS	NON	REPAIR DAMAGED MATERIAL AND O&M PROGRAM	MATERIAL DAMAGED - RANDOM MINOR HOLES, MISSING TILES BELOW SERVING LINE, THRESSHOLD BETWEEN KITCHEN AND CAFETERIA (SAMPLED BY ENCORP SAMPLE # 1-3 LAB REF 052837	3
CLASSROOM BLDG. 1ST FLOOR	CLASSROOMS 601-603 & 606-608	9" GREY FLOOR TILE & MASTIC				MATERIAL HAS BEEN ABATED	
CLASSROOM BLDG. 1ST FLOOR	MECHANICAL ROOM	TRANSITE VENT PIPE AND FIRE DOOR				MATERIAL HAS BEEN ABATED	
CLASSROOM BLDG. 2ND FLOOR	CLASSROOMS 702-708	9" GREY FLOOR TILE & MASTIC				MATERIAL HAS BEEN ABATED	
CLASSROOMS	BUILDING INTERIOR	PIPE COVERING	ASSUMED	LOW	O & M PROGRAM	MATERIAL INTACT, BELOW DROP DOWN CEILING	8
CLASSROOMS	ROOF (SOUTH END OF GYM ROOF, ROOM 304)	TRANSITE VENT PIPE				MATERIAL HAS BEEN ABATED	



3-YEAR AHERA RE-INSPECTION REPORT

District: GLENDALE UNIFIED SCHOOL DISTRICT

Date of Report: 6/3/2015

Inspection Date: 12/23/2014

School: WOODROW WILSON MIDDLE SCHOOL

Inspector: ROBERT CISNEROS

			Percent		Recommended	_	
Building	Space or Rooms	ACM (Material)		Friability		Comment	Priority
GYMNASIUM	BOILER ROOM (#408 IN GIRLS' GYM)	AIRCELL INSULATION	ASSUMED	LOW	REPAIR DAMAGED MATERIAL AND O&M PROGRAM	MATERIAL DAMAGED	5
GYMNASIUM	BOILER ROOM (#506 IN BOYS' GYM)	AIRCELL INSULATION				MATERIAL HAS BEEN ABATED	
GYMNASIUM	BOILER ROOMS (#408 IN GIRLS' GYM) AND (#506 IN BOYS' GYM)	EXPANSION JOINT	ASSUMED	LOW	O & M PROGRAM	MATERIAL INTACT	8
GYMNASIUM	BOYS' AND GIRLS' LOCKER ROOM ATTIC SPACE	EXPANSION JOINT	ASSUMED	LOW	O & M PROGRAM	MATERIAL INTACT	8
GYMNASIUM	BOYS' COACH'S OFFICE	12" TAN FLOOR TILE & MASTIC	ASSUMED	NON	O & M PROGRAM	MATERIAL INTACT	8
GYMNASIUM	GIRLS' BOILER ROOM	TANK INSULATION				MATERIAL HAS BEEN ABATED	

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3-YEAR AHERA RE-INSPECTION REPORT

District: GLENDALE UNIFIED SCHOOL DISTRICT

Inspector: ROBERT CISNEROS

School: WOODROW WILSON MIDDLE SCHOOL Site Code: 30-CC

Inspection Date: 12/23/2014

Date of Report: 6/3/2015

Bite coue: 50			Domas4		Daggers and d	Inspection Date: 12/23/2014	
Building	Space or Rooms	ACM (Material)	Percent Asbestos	Friability	Recommended Action	Comment	Priority
GYMNASIUM	GIRLS' COACH'S OFFICE	9" TAN FLOOR TILE & MASTIC				MATERIAL HAS BEEN ABATED	
GYMNASIUM	SHOWER AREA (BOYS' & GIRLS'), CLOSET (#5), ROOM 50-J, ROOM 407 (GIRLS') AND LOCKER ROOM ATTICS	PIPE COVERING				MATERIAL HAS BEEN ABATED	
GYMNASIUM	SHOWER AREA (BOYS' & GIRLS'), CLOSET (#5), ROOM 50-J, ROOM 407 (GIRLS') AND LOCKER ROOM ATTICS	PIPING ELBOW MUD				MATERIAL HAS BEEN ABATED	
SHOP CLASSES	CLASSROOMS 302 & 303	PIPING ELBOW MUD				MATERIAL HAS BEEN ABATED	
SHOP CLASSES	CLASSROOMS 302 & 303	PIPE COVERING				MATERIAL HAS BEEN ABATED	
SHOP CLASSES	CLASSROOMS 302 & 304	9" BEIGE FLOOR TILE & MASTIC				MATERIAL HAS BEEN ABATED	

No additional samples were collected and/or analyzed during this inspection.







State of California Division of Occupational Safety and Health **Certified Asbestos Consultant**

Alexander E Blankevoort

Certification No. 04-3555

Expires on __03/18/15

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code

State of California Department of Public Health

Lead-Related Construction Certificate

Certific ate Type

Expiration Date

Inspector/Assessor

02/21/2015





Course Approval Number CA-018-04

ENVIRONMENTAL NETWORK CORPORATION

16700 Valley View Avenue, Suite 100 - La Mirada, California 90638 (714) 523-9811 - Fax (714) 523-9810 www.encorp.net

CA01804-141006-06

CERTIFICATE NUMBER

This is to Certify that

Alexander Blankevoort

000-00-1471

Has successfully completed the course

Asbestos Contractor/Supervisor Refresher

as prescribed by the Environmental Protection Agency for procedures in Asbestos Abatement in accordance with 40 CFR 763 Sub E (AHERA) and Toxic Substances Control Act, Title II.

October 06, 2014

TRAINING DATE(S)

October 06, 2015

EXPIRATION DATE

William Bohning

Sohning Director of Training

William Bohning

Course Instructor



Course Approval Number CA-018-06

Engineering our Environment

16700 Valley View Avenue, Suite 100 - La Mirada, California 90638 CERTIFICATE NUMBER (714) 523-9811 - Fax (714) 523-9810 ENVIRONMENTAL NETWORK CORPORATION www.encorp.net

CA01806-141007-07

This is to Certify that

Alexander Blankevoort

000-00-1471

Has successfully completed the course

Asbestos Building Inspector Refresher

as prescribed by the Environmental Protection Agency in accordance with 40 CFR 763 Sub E (AHERA) and Toxic Substances Control Act, Title II. for procedures in Asbestos Abatement

October 07, 2014

TRAINING DATE(S)

William Bohning

Course Instructor

October 07, 2015

EXPIRATION DATE

William Bohning

Director of Training



Course Approval Number CA-018-08

ENVIRONMENTAL NETWORK CORPORATION 16700 Valley View Avenue, Suite 100 - La Mirada, California 90638 (714) 523-9811 - Fax (714) 523-9810 www.encorp.net

CA01808-141007-03

CERTIFICATE NUMBER

This is to Certify that

Alexander Blankevoort

000-00-1471

Has successfully completed the course

Asbestos Management Planner Refresher

as prescribed by the Environmental Protection Agency for procedures in Asbestos Abatement in accordance with 40 CFR 763 Sub E (AHERA) and Toxic Substances Control Act, Title II.

October 07, 2014

TRAINING DATE(S)

October 07, 2015
EXPIRATION DATE

William Bohning

Course Instructor

William Bohning

Director of Training



Course Approval Number CA-018-10

16700 Valley View Avenue, Suite 100 - La Mirada, California 90638 ENVIRONMENTAL NETWORK CORPORATION (714) 523-9811 - Fax (714) 523-9810 www.encorp.net

CA01810-141008-03

CERTIFICATE NUMBER

This is to Certify that

Alexander Blankevoort

000-00-1471

Has successfully completed the course

Asbestos Project Designer Refresher

as prescribed by the Environmental Protection Agency in accordance with 40 CFR 763 Sub E (AHERA) and Toxic Substances Control Act, Title II. for procedures in Asbestos Abatement

October 08, 2014

TRAINING DATE(S)

EXPIRATION DATE October 08, 2015

William Bohning

Director of Training

William Bohning

Course Instructor

State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician

Roberto M Cisneros

Name
Certification No. 10-4695
Expires on 11/17/15

This certification was Issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



Course Approval Number CA-018-04

ENVIRONMENTAL NETWORK CORPORATION

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CA01804-141006-08

CERTIFICATE NUMBER

This is to Certify that

Roberto Cisneros

000-00-0013

Has successfully completed the course

Asbestos Contractor/Supervisor Refresher

as prescribed by the Environmental Protection Agency in accordance with 40 CFR 763 Sub E (AHERA) and Toxic Substances Control Act, Title II. for procedures in Asbestos Abatement

October 06, 2014

TRAINING DATE(S)

EXPIRATION DATE October 06, 2015

William Bohning

Course Instructor

William Bohning

Director of Training



Course Approval Number CA-018-06

CA01806-141007-09

16700 Valley View Avenue, Suite 100 - La Mirada, California 90638 CERTIFICATE NUMBER ENVIRONMENTAL NETWORK CORPORATION (714) 523-9811 - Fax (714) 523-9810 www.encorp.net

This is to Certify that

Roberto Cisneros

000-00-0013

Has successfully completed the course

Asbestos Building Inspector Refresher

as prescribed by the Environmental Protection Agency for procedures in Asbestos Abatement in accordance with 40 CFR 763 Sub E (AHERA) and Toxic Substances Control Act, Title II.

October 07, 2014

TRAINING DATE(S)

William Bohning

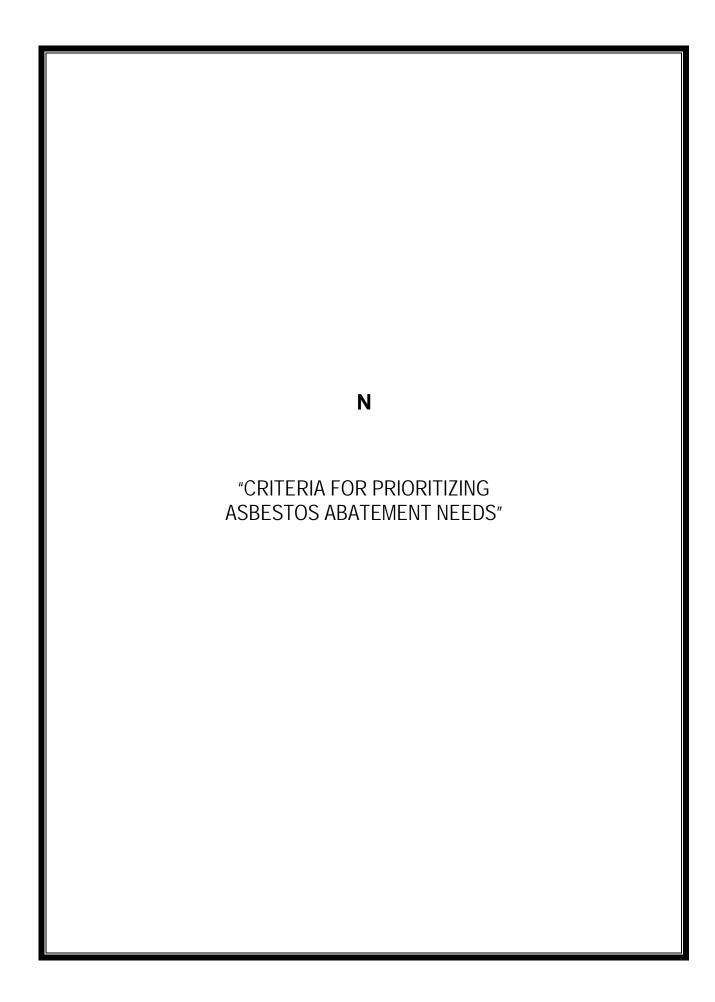
Course Instructor

October 07, 2015

EXPIRATION DATE

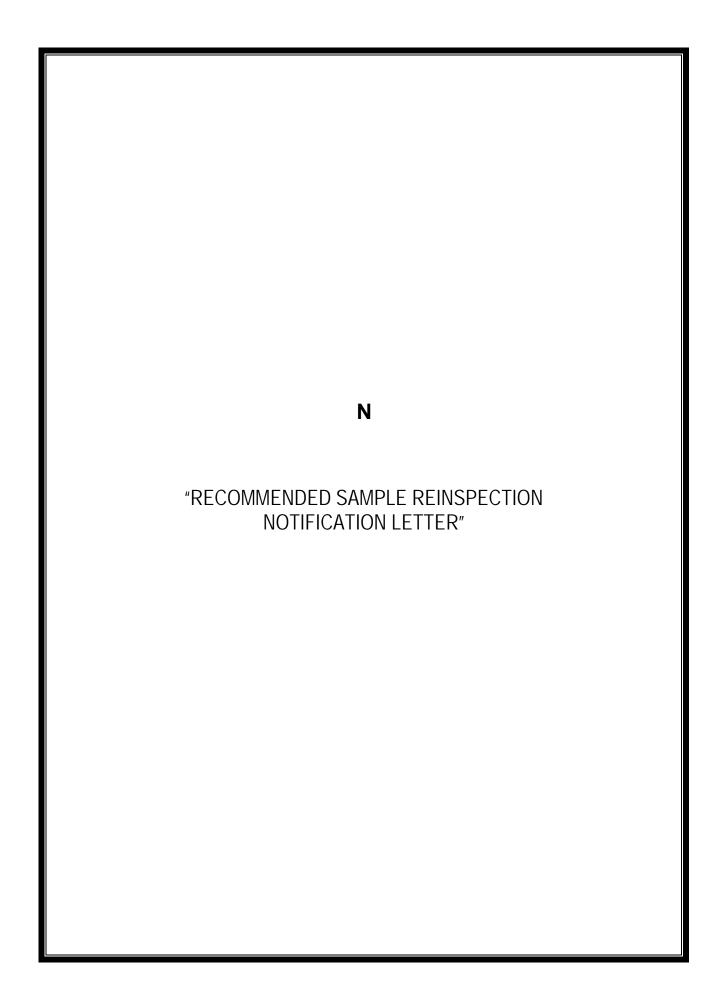
William Bohning Director of Training





N

- 1. Friable or severely damaged asbestos-containing material (ACM), accessible to staff and students: footage of area
- 2. Friable or severely damaged ACM in an air plenum: footage of area.
- 3. Damaged ACM, accessible to staff or students: footage of area.
- 4. Damaged ACM in an air plenum: footage of area exposed to plenum.
- 5. Friable or severely damaged ACM: accessible to maintenance custodial personnel during normal activities: footage of area.
- 6. Damaged ACM: accessible to maintenance or custodial personnel during normal activities: footage of area.
- 7. Nonfriable, non-damaged ACM: easily accessible to staff and students: potential of a major or continuing disturbance: footage of area.
- 8. Nonfriable, non-damaged ACM: accessible to staff and students: potential of a major or continuing disturbance: footage of area.
- 9. Friable or severely damaged, or damaged ACM in an area not normally entered (attics and crawl space): footage or area.
- 10. Nonfriable, non-damaged ACM: accessible to maintenance and custodial personnel during normal activities: footage of area.
- 11. Nonfriable, non-damaged ACM in an area non normally entered (attics and crawl space).
- 12. Materials listed as "non-detect" in previous inspections, but records indicated not sampled adequately to qualify as non-asbestos.



Recommended Sample Re-inspection Notification Letter

Notification of Asbestos Re-Inspection

To:

Parents and Staff of Unified School District

From:

John Smith, O & M Manager, Asbestos Designated Person

Date:

June 25, 2006

In Compliance with the U.S. Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA), in the spring of 2006 we performed inspections of each of our school buildings for asbestos-containing building materials. The AHERA re-inspections and findings are on file in each schools administrative office.

The EPA requires us to perform re-inspections of the asbestos materials every three years, and periodic surveillance every 6-months. During the months of April through June 2006, accredited asbestos inspectors performed these inspections. An accredited management planner reviewed the results of the re-inspections and recommended actions we should take to safely manage each asbestos material in our buildings. The Unified School District will continue to manage them in place, as recommended by the accredited management planner.

The results of the re-inspection are on file in the schools' administrative office. Everyone is welcome to view these anytime during normal school hours (M-F 8:00 a.m. - 3:30 p.m.). The asbestos Designated Person, John Smith, is available to answer any questions you may have about asbestos in our buildings at (999) 922-1234.

Recommended Sample Reinspection Notification Letter

EASTSIDE COMMUNITY PUBLIC SCHOOLS

East Park Avenue Eastside, CA 91005 (999) 922-3333

Bob Smith, Superimendent

Notification of Asbestos Reinspections

TO:

Parents and Staff of Eastside Middle School

FROM:

Bob Smith, Superintendent of Schools

DATE:

December 15, 1991

In compliance with the U.S. Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA), in the fall of 1988 we performed inspections of each of our school buildings for asbestos-containing building materials. The inspection findings and asbestos management plans have been on file in each school administrative office since that time.

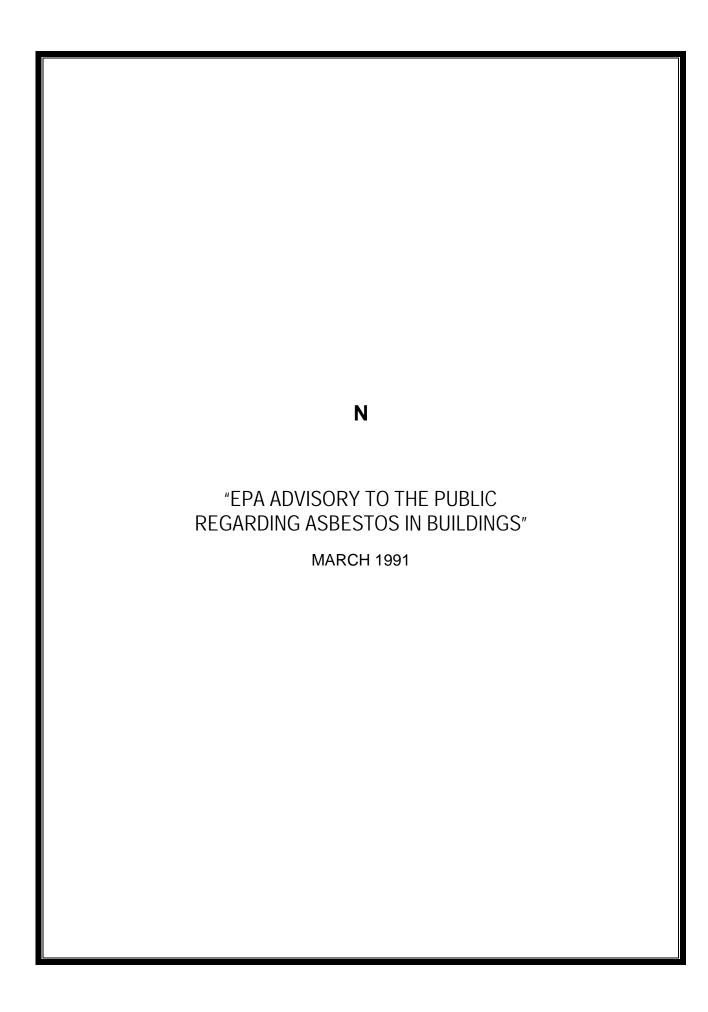
The EPA requires us to perform reinspections of the asbestos materials every three years. During the months of September through November 1991, accredited asbestos inspectors performed these reinspections. An accredited management planner reviewed the results of the reinspections and recommended actions we should take to safely manage each asbestos material in our buildings.

Two significant findings were noted during the reinspection of Eastside Middle School:

- Asbestos-containing water pipe insulation in the kitchen over the dishwasher is slowly deteriorating due to high humidity. The material is scheduled for removal over the Christmas break.
- Unoleum in all bathrooms was not included in the original AHERA inspection. The backing (between the vinyl layer and the floor) is assumed to contain asbestos. The vinyl layer is in good condition and provides an effective barrier, preventing asbestos fiber release. This material has been added to our asbestos maintenance program and we will monitor it for any changes in condition.

All other asbestos materials in this school are in good condition and we will continue to manage them in place, as recommended by the accredited management planner.

The results of the reinspection are on file in the management plan in the school's administrative office. Everyone is welcome to view these anytime during normal school hours (M-F, 8:00 a.m. - 4:30 p.m.). The Asbestos Program Manager, Jill Williams, is available to answer any questions you may have about asbestos in our buildings at (999) 922-3334.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20360

MAR 5 1991

THE ADMINISTRATOR

An Advisory to the Public on Asbestos in Buildings:

The facts About Asbestos in Buildings

In recent months, there have been a number of scientific and news reports about asbestos in buildings. Unfortunately, some of these may have confused, rather than enlightened, the public about the potential health risks of asbestos exposure and the Environmental Protection Agency's (EPA) policies regarding asbestos in schools and other buildings.

I want to summarize the EPA's policies for asbestos control in schools and other buildings. I am providing this summary in the form of five major facts that the Agency has presented in congressional testimony.

PACT ONE: Although asbestos is hazardous, human risk of asbestos disease depends upon exposure.

Asbestos is known to cause cancer and other diseases if asbestos fibers are inhaled into the lung and remain there. This conclusion is based upon studies involving human exposure, particularly exposure at high levels. A recent <u>Science</u> magazine article indicated exposure to chrysotile (common "white" asbestos) <u>may</u> be less likely to cause some asbestos-related diseases. Although there is more evidence of hazard for some types of asbestos, EPA believes there is reason to be concerned about other types, such as chrysotile, for which the data are less conclusive. Based on careful evaluation of available scientific evidence, EPA has adopted a prudent approach in its regulations of assuming that all fibers are of equal concern. Various scientific and regulatory organizations, including the National Academy of Sciences, support EPA's more protective regulatory approach.

It is important to stress that the mere presence of a hazardous substance, such as asbestos on an auditorium ceiling, no more implies that an asbestos-related disease will develop than a poisonous substance in a medicine cabinet or under a kitchen sink implies that a poisoning will occur. Asbestos fibers must be released from the material in which they are contained, and an individual must breathe those fibers in order to incur any chance of disease.

While scientists have been unable to agree on a level of ashestos exposure at which we, as public policy makers, can confidently say, "there is no risk," this does not mean that all or any exposure is inherently dangerous. To the contrary, almost every day we are exposed to some level of asbestos fibers in buildings or in the outdoor air. Based upon available data, very few among us, given existing regulatory controls, have contracted or will ever contract an asbestos-related disease from these relatively low levels of airborne fibers found in buildings. The present scientific evidence will not allow us to state unequivocally that there is a level of exposure below which there is a zero risk, but the risk at these low levels in fact could be negligible or even zero. The risks of asbestos disease can be higher from exposures that occur during mining, manufacturing, and use of some remaining asbestos products, for example, in the repair of automotive brakes.

PACT TWO:

Prevailing asbestos levels in buildings -the levels that school children and you and I
face as building occupants -- seem to be very
low, based upon available data. Accordingly,
the health risk we face as building occupants
also appears to be very low.

Indeed, a 1987 EPA study found that airborne fiber levels in a segment of Federal buildings with asbestos management programs were so low that the levels were in a range comparable to levels outside these buildings. While the data are not conclusive and we are seeking more information through a major research effort, the 1987 study appears to suggest that building occupants face only a minimal risk when their buildings have active asbestos management programs. Severe health problems attributed to ashestos exposure have generally been experienced by workers in industries such as shipbuilding, where they were constantly exposed to very high fiber levels in the air, often without any of the worker protections now afforded to them under the law. of course, some building workers, if they are not properly trained and protected, may disturb asbestos-containing materials and, in so doing, increase the risk to themselves and others.

PACT THREE:

Removal is often not a school district's or other building owner's best course of action to reduce asbestos exposure. In fact, an improper removal can create a dangerous situation where none previously existed.

It is important to understand that, for most situations, EPA's asbestos regulations for schools under the Asbestos Hazard Emergency Response Act (AHERA) do not require removal of asbestos. These regulations allow the school to decide whether asbestos removal, or some other response action, is the best option to protect the health of school students and employees. In general, asbestos removal is most appropriate when asbestos materials, such as pipe or boiler insulation, are damaged beyond repair.

Although we believe most asbestos removals are being conducted properly, asbestos removal practices by their very nature disturb the material and significantly elevate airborne fiber levels. Unless all safeguards are properly applied and strictly followed, exposure in the building can rise, perhaps to levels where we know disease can occur. Consequently, an ill-conceived or poorly conducted removal project can actually increase rather than eliminate risk.

FACT FOUR:

EPA only requires asbestos removal in order to prevent significant public exposure to asbestos, such as during building renovation or demolition.

Prior to a major renovation or demolition, asbestos material that is likely to be disturbed or damaged to the extent that significant amounts of asbestos would be released must be removed using approved practices under EPA's asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP) regulation. Demolishing a building containing large amounts of asbestos, for example, would likely result in significantly increased exposure and could create an imminent hazard. Clearly, asbestos removal before the wrecking ball swings into action is appropriate to protect public health. However, this cannot be said of arbitrary asbestos removal projects, which, as noted above, can actually incresse health risk unless properly performed. This, in part, is why EPA has not mandated asbestos removal from schools or other buildings beyond the NESHAP requirement, which has the effect of gradually and rationally taking all remaining asbestos building materials out of the inventory.

PACT FIVE: SPA does recommend in-place sanagement whenever asbestos is discovered.

Instead of removal, a conscientious in-place management program will usually control fiber releases, particularly when the materials are not significantly damaged and are not likely to be disturbed. That is why Congress mandated such a program in schools through AHERA.

In-place management, of course, does not mean "do nothing." It means, first, that the building owner or manager should identify asbestos, through a building-wide inventory or on a case-by-case basis before suspect materials are disturbed by renovations or other actions. The AHERA program requires an inventory of all asbestos materials in schools by properly accredited individuals.

After the material is identified, the school's personnel, building owner or manager can then institute controls to ensure that the day-to-day management of the building is carried out in a manner that prevents or minimizes the release of asbestos fibers into the air. These controls will ensure that when asbestos fibers are released, either accidentally or intentionally, proper management and cleanup procedures are implemented.

Another concern of EPA and other Federal, State and local agencies which regulate asbestos is to ensure proper worker training and protection. Maintenance and service workers in buildings, in the course of their daily activities, may disturb materials and can thereby elevate asbestos fiber levels, especially for themselves, if they are not properly trained and protected. For these persons, risk may be significantly higher than for other building occupants. Proper worker training and protection, as part of an active in-place management program, can reduce any unnecessary asbestos exposure for these workers and others. AHERA requires this training for school employees whose job activities may result in asbestos disturbances.

In addition to the steps outlined above, an in-place management program will usually include notification to workers and occupants of the existence of asbestos in their building, periodic surveillance of the material, and proper recordkeeping. EPA requires all of these activities for schools and strongly recommends that other building owners also establish comprehensive asbestos management programs. Without such programs, asbestos materials could be damaged or deteriorate, which may result in elevated levels of airborne asbestos fibers.

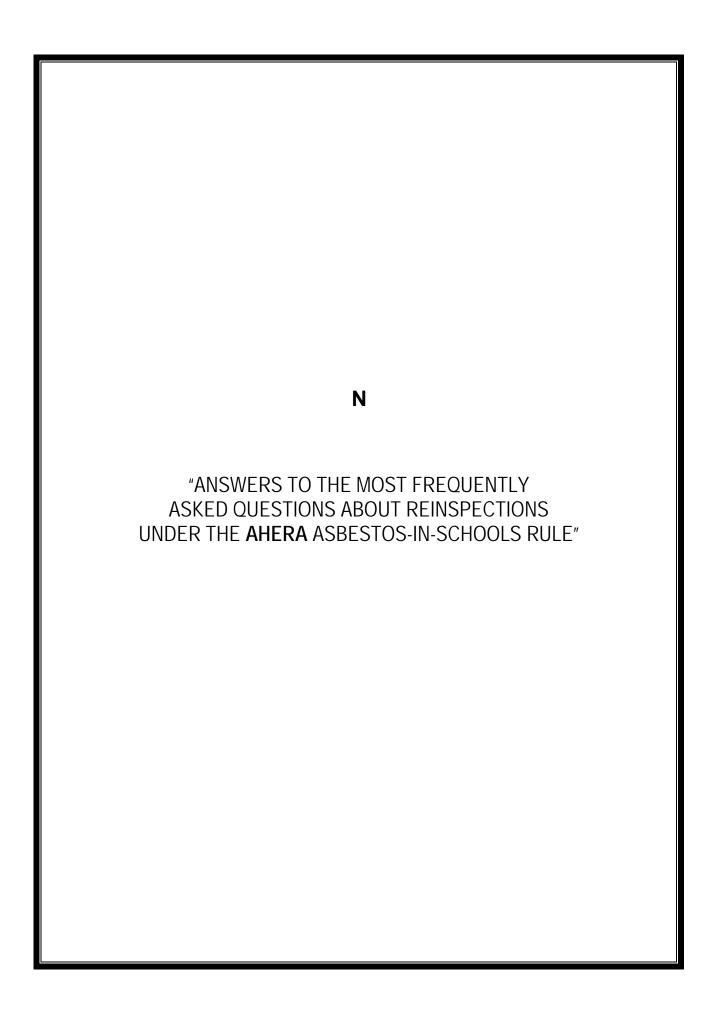
While the management costs of all the above activities will depend upon the amount, condition, and location of the materials, such a program need not be expensive. In many instances, an inplace management program may be all that is necessary to control the release of aspestos fibers, until the aspestos-containing material in a building is scheduled for removal because of renovation or demolition activities.

In summary, EPA's best advice on aspestos is neither to rip it all out in a panic nor to ignore the problem under the false presumption that aspestos is "risk free." Rather, we recommend a practical approach that protects public health by emphasizing that aspestos material in buildings should be located, that it should be appropriately managed, and that those workers who may disturb it should be properly trained and protected. That has been, and continues to be, EPA's position.

If you have questions or need additional information about asbestos in schools and other buildings, please call EPA's Toxics Hotline at (202) 554-1404 or write the Environmental Assistance Division (TS-799), Office of Pesticides and Toxics Substances, 401 M Street, Washington, DC 20460.

Sincerely,

William K. Railly



20 Frequently Asked Questions About Asbestos-in-Schools

1. What is asbestos?

Asbestos is the name given to a number of naturally occurring fibrous minerals that are mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength.

2. What are the health effects of asbestos exposure?

Asbestos exposure can lead to diseases such as lung cancer, asbestosis (lung scarring), and mesothelioma (cancer of the lung cavity lining). There is a long latency period for these diseases. It could be 30 years after exposure before symptoms of disease begin.

3. Is there asbestos in my child's school?

It is very possible that there is asbestos in you child's school. Asbestos can be found in various places within schools. Friable asbestos, or asbestos that can be broken by hand pressure, is of greatest concern because these fibers can most easily be released into the air and inhaled into the lungs. Examples of potentially hazardous materials include: friable asbestos-containing boiler wrap, pipe wrap insulation, ceiling tiles, and wallboard.

4. Is it dangerous to have asbestos containing material in my school?

Not necessarily. Undamaged asbestos that is properly managed in place poses little health risk to students or teachers. However, it is important that the proper school designated authorities regularly inspect asbestos containing materials to ensure they remain intact. Asbestos can pose a hazard to students, teachers, and school employees when it is disturbed and becomes airborne and therefore breathable. It has been EPA's long-standing policy that undamaged non-friable asbestos is best left undisturbed and managed in place. Removing asbestos often has the potential to create a greater health risk than leaving it undisturbed.

5. I thought asbestos was banned and then removed from schools years ago?

Asbestos products, with few exceptions, are <u>not</u> currently banned in the United States and are still "managed-in-place" in thousands of schools nationwide under requirements set forth by the Asbestos Hazard Emergency Response Act (AHERA). It is possible that asbestos containing materials were completely removed from your school. It is, however, more likely that asbestos is currently managed in place within your school.

6. If my children have been in a building with asbestos, do they need to see a physician?

If I taught in a building with asbestos, do I need to see a physician?

Not necessarily. Asbestos does not pose a health risk if it is managed properly. However, if you feel you may have been exposed to asbestos fibers in the air, you should consult with a physician that specializes in lung disorders or occupational exposures.

7. Is the school district required to do anything about asbestos-in-schools?

Yes. AHERA, or the Asbestos Hazard Emergency Response Act, was passed by Congress in 1986. AHERA requires public school districts and non-profit private schools to inspect their schools for asbestos containing building material and prepare management plans which recommend the best way to reduce the hazard from any asbestos that may be present. Options include repairing damaged asbestos containing material, spraying it with sealants, enclosing it, removing it, or keeping it in good condition so that it does not release fibers. The plans must be developed by accredited management planners and approved by the State. The school authority must notify parent, teacher and employer organizations of the plans, and then the plans must be implemented. The school district must also perform periodic surveillance of asbestos containing material every 6 months in its schools. AHERA also requires accreditation of abatement designers, contractor supervisors and workers, building inspectors, and school management plan writers.

8. What is an asbestos management plan?

An asbestos management plan is required to provide documentation of the recommended asbestos response actions, the location of asbestos within the school, and any action taken to repair or remove the material. The school authority must maintain records to be included in the Asbestos Management Plan. These records include among other things:

- List of the name and address of each school building and whether the building has asbestos containing building material, and what type of asbestos-containing material.
- Date of the original school inspection
- The plan for re-inspections
- A blueprint that clearly identifies the location of asbestos-containing building material that remains in the school
- A description of any response action or preventive measures taken to reduce asbestos exposure.
- A copy of the analysis of any building material, and the name and address of any laboratory that sampled the material
- The name, address, and telephone number of the "designated person" to ensure the duties of the local education agency (LEA) are carried out
- A description of steps taken to inform workers, teachers, and students or their legal guardians about inspections, re-inspections, response actions, and periodic surveillance.

9. Do I have the right as a teacher or employee to access my school's management plan?

Yes. Parents, teachers, and school employees, or their representatives, have the right to inspect the school's asbestos management plan. The school must make the plan available within a reasonable amount of time.

10. Does this management plan have to be updated periodically?

Yes. The asbestos management plan must be updated with information collected during periodic surveillance every 6 months, re-inspections every 3 years, and every time a response action is taken within the school. Also, records of annual notifications to parents, teachers, and staff concerning the availability of the school's asbestos management plan must be included within the asbestos management plan files.

11. Does my school district have to inform me of asbestos that is in my school building?

Yes. Schools are required to notify parent-teacher organizations once a year about the availability of the school's asbestos management plan and of any asbestos abatement activity taking place within the school.

12. Was my school required to be inspected for asbestos?

Yes, unless the building architect certified in writing that no asbestos materials were used in the building's manufacture. The results of the inspections and all re-inspections, required every three years, are contained within the schools asbestos management plan. A copy of the asbestos management plan is required to be housed in the school's administrative office.

13. Does my school district/local education agency know where the asbestos in its schools is located?

They are required to know and to describe where the material is located on a blue-print diagram of the school building(s).

14. Who is responsible for overseeing the management of asbestos in a school building?

The school district/local education agency must nominate a "designated person" to perform and delegate, if necessary, the management of asbestos in a school building.

15. How can we have the air tested in my school?

AHERA only requires testing following an asbestos repair or removal activity to determine whether the activity has been properly completed. This is done by measuring the amount of asbestos in the air where the repair or removal activity has taken place. However, the educational authority, e.g., the school district, may hire a qualified consultant to test its air at any time.

16. I have seen the janitor machine-cleaning the floor tile in our school. Should I be worried that these machines will degrade the tiles and create a hazard?

Machine-cleaning of floor tile can be part of a good maintenance program for asbestos-containing floor tiles, as long as the machine is operated properly and the tiles are not in poor condition. EPA has issued special guidance on the proper maintenance of asbestos-containing floor tiles, the guidance is available from the TSCA Hotline at (202) 554-1404. Undamaged, well maintained floor tiles present little risk to students, teachers, and school staff.

17. Who is responsible for enforcing the asbestos-in-schools regulations?

EPA is the primary governmental agency responsible for enforcing the regulations promulgated under AHERA. However, if your State has been issued a wavier, the State agency is responsible for enforcing the requirements. These states are: Connecticut, Colorado, Louisiana, Massachusetts, Maine, Oklahoma, Rhode Island, Texas, and Utah.

18. Who can I call to report a suspected asbestos violation?

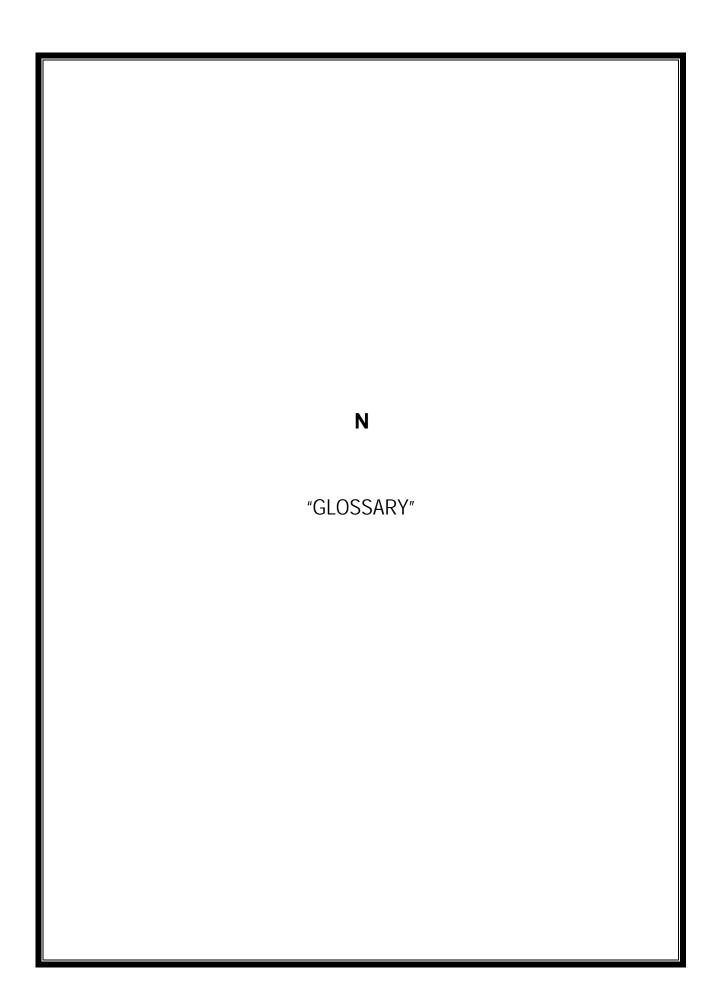
You can report violations by contacting your EPA regional asbestos coordinator listed at http://www.epa.gov/asbestos/regioncontact.html, or by calling the Asbestos Ombudsman at: 1-800-368-5888

19. What is EPA doing now about asbestos-in-schools?

EPA will provide local education agencies and parents and teachers with information about the AHERA asbestos-in-schools requirements. A new website has been launched, documents have been updated, and a partnership developed with the National Parent-Teacher Association (PTA), the National Education Association (NEA), and the Department of Education.

20. Where can I obtain more information about the asbestos-in-schools regulations?

You can visit our website at http://www.epa.gov/asbestos/asbestos_in_schools.html or call the TSCA Hotline at: 202-554-1404.



Asbestos Analysts Registry. A registry of individual asbestos analysts who have met asbestos air sample analysis criteria set by the American Industrial Hygiene Association

atement

Procedures to control fiber release from asbestos-containing materials. Includes removal, encapsulation, and enclosure.

American Board of Industrial Hygiene. An adjunct Organization of the AIHA, ABIH administer comprehensive examinations for industrial hygienists and certifies persons who meet their criteria and pass the examinations as Certified Industrial Hygienists (CIH).

Asbestos-containing building material, which includes surfacing material, thermal system insulation, or miscellaneous material that is found in or on interior structural members or other parts of a building.

ondition

ood: No visible damage or deterioration, or showing only very limited damage or deterioration.

amaged: Physical injury or deterioration such that the internal structure of the material is inadequate, material which has delaminated such that its bond to the substrate is inadequate, or which lacks fiber cohesion or adhesion properties for any other reason. Thermal system insulation (TSI) is considered damaged when it is lacking part or all of its covering. Such damage may be shown by the separation of ACM into layers; flaking, blistering, or crumbling; water damage or stains; scrapes, mars or gouges; exposed TSI beneath its covering.

igni icantly amaged: Damage that is extensive and severe.

ccredited or ccreditation

Person or laboratory accredited in accordance with 40 CFR Part 763, Subpart E.

American Conference of Governmental Industrial Hygienists

Asbestos-containing material. EPA definition: A material that contains more than 1% asbestos by weight. Under the OSHA Hazard Communication Standard, any material containing 0.1% or more must be included in the hazard communications program, even though it is not ACM as the EPA defines it.

dministrator

The person appointed by the President to run the EPA.

Air Filtration Device. Usually refers to machines used to provide ventilation and a negative static pressure differential within a completely enclosed asbestos work area. AFDs usually consist of a fan system to draw air through a special set of filters – a gross pre-filter, an intermediate filter and a HEPA filter - and exhaust clean air to the outside. AFDs are rated by the amount of air that can be drawn through them in a given amount of time, which is expressed cubic feet of air per minute (e.g., 2000 CFM). Loaded or clogged filters can seriously affect the displacement volume capability or the efficiency of these devices. See <u>og</u>.

ggressi e ethod

Removal or disturbance of building material by sanding, abrading, grinding or other method that breaks, crumbles, or disintegrates intact ACM.

ggressi e ampling

A method of taking air samples (usually clearance samples) where the air is intentionally stirred up to disturb any dust that may be present so that the air monitoring results can reflect "worst" case conditions.

The Asbestos Hazard Emergency Response Act. This Act was signed into law on October 22, 1986 by President Reagan. It established the framework for a regulation which requires, among other things, that elementary and secondary schools identify asbestos-containing materials in school buildings, institute programs aimed at minimizing the risk of asbestos exposure in those buildings, and reinspect those materials at least every three (3) years.

regulation/rule

40 CFR 763, Asbestos-Containing Materials in Schools: Final Rule and Notice, U.S. Environmental Protection Agency, February 1987.

ategories

Seven categories defined in the AHERA regulations, one of which must be assigned to each friable surfacing and miscellaneous ACBM and each asbestos-containing TSI during an inspection or reinspection.

- 1. Damaged or significantly damaged TSI ACBM.
- 2. Damaged friable surfacing ACBM.
- 3. Significantly damaged friable surfacing ACBM.
- 4. Damaged or significantly damaged friable miscellaneous ACBM.
- 5. ACBM with potential for damage.
- 6. ACBM with potential for significant damage.
- 7. Any remaining friable ACBM or friable suspected ACBM.

esignated erson/ esignated erson

Person designated by the Local Education Agency to ensure that the AHERA requirements are properly implemented.

mended ater

Water containing a surfactant that maximizes wetting and reduces the tendency for asbestos fibers to become airborne.

Air-purifying Respirator. A respirator that relies on filters to remove a particular contaminant(s) from the ambient air. They include both negative-pressure and powered respirators. No type of air-purifying respirator will protect the wearer from low oxygen atmospheres.

s estos

Naturally occurring fibrous mineral used in many building materials, primarily for fireproofing, thermal system insulation, sound insulation and decoration. The asbestiform varieties of amosite (cummingtonite grunerite), chrysotile (serpentine), crocidolite (riebeckite), anthophyllite, tremolite, and actinolite.

s estos atement

Procedures to control fiber release from asbestos-containing materials in a building or to remove it entirely. These may involve removal, encapsulation, repair, enclosure, encasement, and operations and maintenance programs.

s estos ontaining aterial

Material composed of asbestos of any type and in an amount greater than 1 percent by weight, either alone or mixed with other fibrous or non-fibrous materials, as defined by EPA or the State of California, Division of Occupational Safety and Health (DOSH).

s estos ontaining aste aterial

Asbestos-containing material or asbestos-contaminated objects requiring disposal.

s estosis

A fibrotic scarring of the lungs resulting from prolonged exposure to high levels of asbestos dust. Asbestosis can have a latency period of 15 or more years.

Air Sampling Professional. A person who conducts air monitoring for various airborne contaminants, including asbestos. Often used as a contractual term or in some regulations.

ssessment

Evaluation of the physical condition and potential for damage of all friable ACBM and asbestos-containing thermal system insulation. AHERA requires classification of each ACBM assessed into one of seven categories based on material type and damage/potential for damage.

ssumed

Suspect building material that has not been sampled and analyzed for asbestos content and must, therefore, be treated as an ACBM by the LEA.

Building Manager

ul ample

A small portion (usually about thumbnail size) of a suspect asbestos-containing building material collected by the inspector for laboratory analysis to determine asbestos content.

erti ied s estos onsultant

A person certified by either a state agency or by EPA, who can perform surveys, write management plans, design abatement projects and write specifications, and monitor asbestos abatement projects.

erti ied ndustrial ygienist

One certified in the comprehensive practice of industrial hygiene by the American Board of Industrial Hygiene (AIHA).

lass s estos or

Activities involving the removal of TSI and surfacing ACM and PACM.

lass s estos or

Activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

lass s estos or

Repair and maintenance operations, where "ACM", including thermal system insulation and surfacing material, is likely to be disturbed.

lass s estos or

Maintenance and custodial activities during which employees contact ACM and PACM and activities to clean up waste and debris containing ACM and PACM.

learance ir onitoring

Air samples that are taken following the completion of an asbestos abatement activity to ensure that the activity is complete and that the area is safe to reoccupy. NIOSH recommends using a level of 0.01f/cc when analyzed by Phase Contrast Microscopy. Air clearance is required for all response actions undertaken in schools.

ommercial and u lic uildings

The interior space of any building which is not a school building, residential apartment building of fewer than 10 units or a detached single-family home. Examples of public and commercial buildings are: government-owned buildings, colleges, museums, airports, hospitals, churches, preschools, stores, warehouses, and factories.

ompetent erson s estos

One who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1925.32(f): in addition, for Class II and Class II work who is specially trained in a training course which meet the criteria of EPA's Model Accreditation Plan (40 CFR 763) for project designer or supervisor, or its equivalent and, for Class II and Class IV work, who is trained in an operations and maintenance (O&M) course developed by EPA [40 CFR 763.92(a)(2)].

ompleted einspection

The entire process of the visual examination and assessment of known and assumed ACBM in a school building; recommended response actions by the management planner; and submission of reinspection findings and recommendations to the designated person. Reinspections are required by AHERA every three (3) years after management plan implementation.

Custodial Services Supervisor

urrent ccreditation

Having successfully completed an EPA-approved accreditation or refresher course within one (1) year of the reinspection (for inspectors) or the management plan review (for management planners).

econ

Short for decontamination unit. E.g., Have you finished your decon yet? (referring to personal bodily decontamination unit); Have you built the decon yet? (referring to the personnel decontamination unit). This usually refers to a five chamber unit with a shower for asbestos workers to enter and exit.

econtamination rea

An enclosed area adjacent and connected to the regulated, area consisting of an equipment room, shower room, and clean room, which is used for decontamination of workers and equipment.

<u>elamination</u>

The separation of one layer from another. When a surface coating, e.g., acoustical plaster finish coat, separates or loses adhesion to underlying material, e.g., brown coat layer. A peeling away.

istur ance

Contact which releases fibers from ACM or PACM or debris containing ACM or PACM. This term includes activities that disrupt the matrix of ACM or PACM, render ACM or PACM friable, or generate visible debris. Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount which can be contained in one standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained in one glove bag or waste bag which shall not exceed 60 inches in length and width.

ncapsulation

The application of an encapsulant to asbestos-containing materials to minimize the release of asbestos fibers into the air. The treatment of asbestos-containing material with a liquid that covers the surface with a protective coating or embeds fibers in an adhesive matrix to prevent the release of asbestos fibers.

nclosure

The construction of an air-tight, impermeable, permanent barrier around asbestos-containing material to control the release of asbestos fibers into the air.

U.S. Environmental Protection Agency (U.S. EPA) 401 "M" Street, SW Washington, D.C. 20460 California / EPA Region IX (Cal/EPA) 75 Hawthorne Street San Francisco, California 94105 (415) 744-1500

aluation tudy

An EPA report entitled Evaluation of the Asbestos Hazard Emergency Response Act (AHERA).

clusion

One of several situations, which permit the LEA to delete one or more of the items required by AHERA. For example, records of previous sample collection and analysis may be used by the accredited inspector in lieu of AHERA bulk sampling.

terior reas

Subdivision of areas of a building with one or more walls open to the outside, such as covered walkways or porticos.

Facility Asbestos Coordinator

it est

A method to determine if a respirator fits a particular person properly, so that adequate respiratory protection is assured. Tow methods are used. **ualitati e** fit tests place the subject in a test chamber and introduce an odorous or irritating substance to the chamber; if the respirator fits properly, the wearer will experience no odor or irritation. **uantitati e** fit tests put the subject in a respirator fitted with a probe to measure the fiber level inside the face piece. The subject is placed in a sealed chamber and an aerosol mixture with a known fiber concentration is introduces. An actual, numerical protection factor can then be calculated by knowing the concentration of fibers in the air both inside and outside the mask.

ria le

A material that when dry may be crumbled, pulverized, or reduced to a powder by hand pressure when dry and can include previously non-friable material that has become damaged.

unctional pace

Under AHERA, a room, group of rooms, or homogeneous area designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.

lo e aq

A heavy gauge, polyethylene, PVC or other material fitted with a set of arms with gloves attached and used for removal of small amounts of asbestos-containing materials such as thermal system insulation (especially pipe insulation) and valve packings. The glovebag is designed so that it can be sealed airtight around the pipe or valve, thereby preventing the release of asbestos fibers from the bag during removal.

ilters

High-Efficiency Particulate Air (HEPA) filters are capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3 m in diameter or larger.

acuum

A vacuum system equipped with HEPA filtration.

og

Short for an air filtration device equipped with a High Efficiency Particulate Air filter (HEPA).

ole

Short for an enclosed asbestos work area or containment. E.g., The workers put on their equipment and went into the hole.

omogeneous ampling rea

An area of surfacing, thermal, or miscellaneous material that is uniform in color and texture.

Heating, ventilation, and air conditioning system. Refers to the systems and components in buildings that provide heating, cooling and air circulation. HVAC systems may be insulated with, or otherwise have, asbestos-containing materials incorporated into them. HVAC systems also act as a major pathway for asbestos contamination dispersion after an uncontrolled fiber release episode.

denti ied aterial

Any AHERA-defined suspect material found during the original AHERA inspection that was also recorded in the management plan for the building.

ndustrial ygienist

A professional qualified by education, training, and experience to anticipate recognize, evaluate and develop controls for occupational health hazards.

nterior pace

The space within schools and public and commercial buildings, including exterior hallways connecting buildings, porticos, and mechanical systems used to condition interior space.

atency eriod

The period between exposure to a disease-causing agent and the onset or appearance of disease symptoms. Often referred to as the lag time. The latency period for asbestos-related diseases ranges from 15 years for asbestosis to 30 years or more for lung cancer and mesothelioma.

ocal ducation gency

An educational agency at the local level that exists primarily to operate schools or to contract for educational services for elementary and secondary public and non-profit private schools. For non-profit schools, this includes the building owner.

anagement lan

A document that each Local Education Agency is required to prepare under AHERA regulations. It describes all activities planned and undertaken by a school to comply with AHERA regulations, such as building inspections to identify asbestoscontaining materials, response actions, and operations and maintenance programs to minimize the risk of exposure to asbestos in school buildings.

aterial ategory

Broad classification of suspect materials into , **sur acing** material and **miscellaneous** material.

iscellaneous aterial

Interior building material on structural components, such as floor or ceiling tiles. Does not include TSI or surfacing material.

onitoring or eriodic ur eillance

Visual survey for the presence of changes in conditions or visible emissions or air monitoring performed in accordance with accepted methods.

Mine Safety and Health Administration. A branch of the U.S. Department of Labor that regulates occupational safety and health in the mining and quarrying industries. MSHA also evaluates different respiratory protection devices; MSHA approved respiratory protection devices carry the MSHA seal and approval number for the particular device's use against a particular hazard.

Negati e ir achine

A ventilation machine equipped with a pre-filter, secondary filter, and HEPA filter, which is used during major abatement activities to create a negative pressure enclosure and remove and trap airborne asbestos fibers.

N

National Emission Standards for Hazardous Air Pollutants. Authorized under the Clean Air Act and administered by the U.S. EPA, the NESHAP rules cover a wide variety of substances, including asbestos. NESHAPs requires formal notification of EPA for renovation projects that disturb friable ACM above 160 linear feet or 260 square feet and for all demolition operations. NESHAPs also requires the use of wet removal methods and the disposal of ACM in an approved landfill with standardized recording procedures.

N

A federal agency that conducts research on health and safety concerns, tests and certifies respirators, and trains occupational safety and health professionals. NIOSH also issues and recommends a "clean" level of 0.01 fibers/cubic centimeter (f/cc) for asbestos abatement projects where "clearance" air samples are analyzed by Phase Contrast Microscopy (PCM).

N ethod

A standardized method or air sample collection, preparation and analysis by phase contrast microscopy to quantify airborne fiber concentrations.

N

National Institute of Standards and Technology. Formerly the National Bureau of Standards, NISH is responsible for setting primary standards for weights and measures. NIST administers the National Voluntary Laboratory Accreditation Program for labs conducting bulk material sample analysis using PLM and air sample analysis by TEM for AHERA projects.

Non ria le

Materials that cannot be crumbled, pulverized, or reduced to powder by hand pressure when dry. Usually encapsulated in a hard medium such as cement. Nonfriable ACM can be rendered friable by cutting, sanding, grinding or otherwise abrading the material so that significant amounts of asbestos fibers are released.

N

National Voluntary Laboratory Accreditation Program. Administered by NIST, NVLAP is a quality assurance and proficiency testing program for laboratories conducting analysis for AHERA projects. NVLAP has separate programs and criteria for labs conducting PLM analysis of bulk material samples and TEM analysis of air samples.

perations and aintenance rogram

Program of work practices to maintain friable ACBM in good condition, ensure cleanup of asbestos fibers previously released, and prevent future release by minimizing and controlling friable ACBM disturbance or damage.

riginal nspection/ riginal nspection

Examination of school buildings arranged by Local Education Agency, pursuant to AHERA, to initially identify asbestos-containing materials, evaluate the condition of those materials, and take samples of materials suspected to contain asbestos. Inspections are performed by inspectors accredited by the EPA, or by EPA-approved State accreditation programs.

Presumed asbestos-containing material. Thermal system insulation and surfacing material found in buildings constructed no later than 1980. The designation of a material as "PACM" may be rebutted pursuant to paragraph (k)(4) of 29 CFR 1926.1101.

Permissible Exposure Level. This level is established by OSHA and is 0.1 fibers per cubic centimeter (f/cc). Certain administrative and engineering procedures are required if the PEL is reached or exceeded.

eriodic ur eillance

A visual examination for any change in material condition of ACBM, and assumed ACBM, in a school building re uires a periodic sur eillance at least once e ery si months

Polarized Light Microscopy, used for analysis of bulk samples to determine asbestos content of a material.

re iously nidenti ied aterial

Any AHERA-defined suspect material present in a building at any time of the original AHERA inspection that is not reported in the management plan.

rotection actor

Refers to the protection factor of various respirators. The ratio of the ambient airborne concentration of the contaminant to the concentration inside the facepiece. The higher the protection factor, the higher the degree of protection given by a particular respiratory protection device.

ecorded ocation

An area in which a suspect material was present during the inspection, and which is indicated in the management plan as having the material present.

einspection

The re-examination, by an accredited inspector, of a school building for which an original AHERA inspection was previously performed, including a re-evaluation and response action recommendations by an accredited management planner. Reinspection of school buildings containing ACBM is required by AHERA regulations at least once every three (3) years.

emo al

Taking out or stripping ACBM from an area, a functional space, or a homogeneous area.

epair

Procedures used to patch or cover damaged asbestos-containing materials, other than enclosure or encapsulation. Examples include covering the damage with plastic sheeting, duct tape, or plaster.

esilient heet looring/ inoleum

A type of floor covering that is pre-formed in long sheets. Generally, the sheets are unrolled and secured to the floor with an adhesive. These commonly have a vinyl-based upper surface. The backing may contain asbestos.

espirator

A device to protect the wearer from inhalation of harmful contaminants. Respirators can be classified by the amount of face coverage they provide and their method of protection. E.g., a half-face, negative-pressure, air-purifying respirator, or a full-face, pressure demand, supplied air respirator.

esponse ctions

Methods, including removal, encapsulation, enclosure, repair, and operations & maintenance, that protect human health and the environment from friable ACBM.

oom/ rea

A well-defined space within a building, generally a distinct room, but also a hall, crawlspace, or other distinct space. This term may refer to the entire homogeneous sampling area or to a functional space but is generally a subset of these.

chool uilding

Any structure essential to the operation of a school and under the authority of the LEA, including classrooms, student housing, athletic facilities, administrative areas, garages, and maintenance areas. Several buildings may be present at one school.

Scanning Electron Microscope. SEM is used to examine three dimensional solid objects, producing a picture that clearly shows fine detail with high contrast. It, like the TEM, uses a beam of electrons instead of light to produce the image. SEM is not routinely used for sample analysis for asbestos (air or bulk material), though it sometimes can provide additional data not otherwise obtainable, such as surface characteristic of a particular material. SEM is not capable of the extremely high magnifications of a TEM.

Standard Operation Procedure. Standardized procedures for dealing with particular sets of circumstances or events. Asbestos operations and maintenance plans utilize SOPs to deal with common situations.

ur acing aterial

Material that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes).

tatic ampling

An air sampling technique where no attempt is made to get settled dust into the air where it may be sampled by routine methods. Opposite of aggressive sampling. Static sampling may result in low measurements of airborne fibers even when clearly visible asbestos debris is present in an area.

Short-term Exposure Limit. Also referred to as the Excursion Limit. OSHA set a STEL of 1.0 f/cc over a thirty-minute time weighted average (TWA) to regulate short-duration asbestos exposures which may not be measurable using an eight-hour TWA.

ur acing

Asbestos-containing material that is sprayed-on, troweled-on or otherwise applied to surfaces. E.g., acoustical plasters on ceilings, fireproofing on structural members, or other materials on surfaces for acoustical, fireproofing or other purposes.

upplied air espirator

A respirator that is supplied with compressed, purified air form a remote source, usually with a hose. This type of respirator can be operated in two different modes: continuous flow – where a constant supply of air passes to the wearer; and, pressure demand – where a slight positive pressure inside the face piece is lowered when the wearer inhales and a diaphragm valve allow more air into the face piece. The latter mode offers a higher degree of protection. Similar to what scuba divers use underwater.

uspect aterial

Building material suspected to contain asbestos because of past practices in its manufacture and use. Includes surfacing material, gypsum wallboard (also called sheetrock or drywall), floor tile, ceiling tile, thermal system insulation, and miscellaneous other materials. Suspect materials are classified as ACBM or non-ACBM by analyzing bulk samples to determine asbestos content.

Transmission Electron Microscope. An electron microscope that directs a hightly charged, focused beam of electrons through a specially prepared sample to form an image on a phosphorescent screen. TEMs are capable of magnifying images to the atomic level. They can be equipped with a variety of peripheral devices to aid in analyzing and gathering data on specimens.

hermal ystem nsulation

ACM applied to pipes, fittings, boilers, breaching, tanks, ducts or other structural components to prevent heat loss or gain.

Threshold Limit Value. A time-weighted average concentration under which most people can work consistently for 8 hours a day, day after day, with no harmful effects. Table of these values and precautions are published annually by the ACGIH.

<u>otal mount</u>

Estimated amount (in square or linear feet) of suspect material in a building(s) at the time of the original AHERA inspection.

Toxic Substances Control Act. The authorizing legislation that gives EPA the authority to regulate toxic substances in commerce.

Thermal System Insulation. ACM applied to pipes, fittings, boilers, breeching, tanks, ducts of other interior structural components to prevent heat loss or gain or water condensation. Higher temperature insulation like that found on thermal system components is more likely to contain amosite and crocidolite asbestos.

nderestimated uantity

The difference between the total amount of a suspect material found during the Evaluation Study and the amount of the same material recorded in the management plan, when the latter quantity is less than 80 percent of the former.

n ironmental rotection gency egulations or s estos

Title 40, Code of Federal Regulations, Part 61, Subparts A and B - NESHAPS. Title 40, Code of Federal Regulations, Part 763 - AHERA.

i ration ampening loth

Cloth commonly found on ductwork where duct size changes, used to reduce noise.

all oard

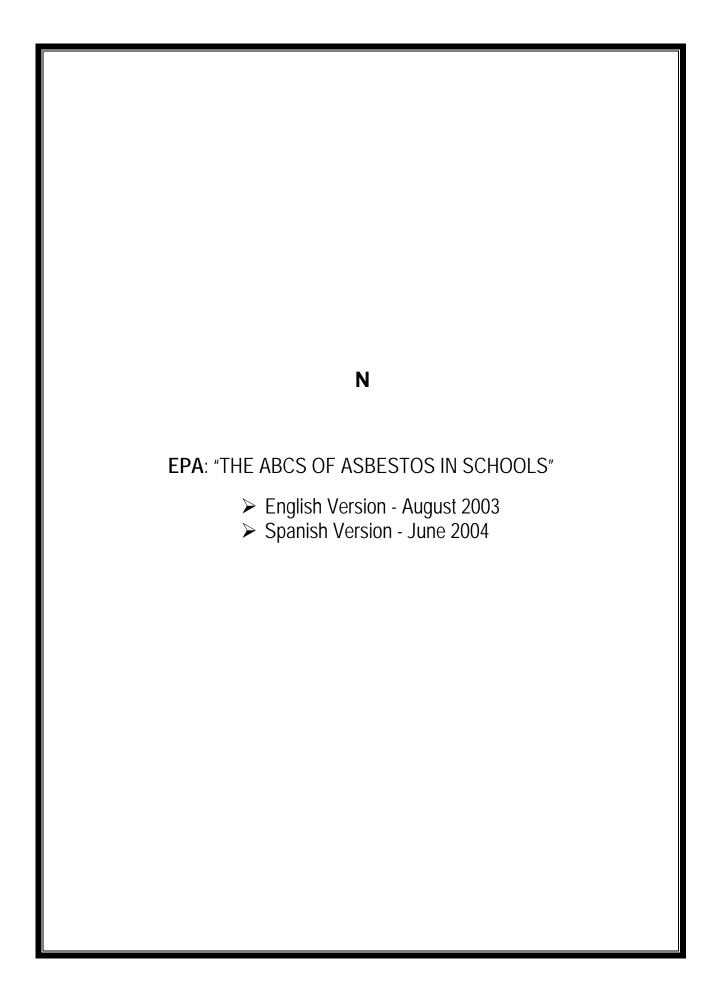
Generic term for any wall surface installed as sheets, rather than applied wet. Includes gypsum wallboard (also called sheetrock or drywall), transite panels, etc.

et ethod

The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other utensils that have been dampened with water and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.

or rea ir ample

An air sample collected inside an enclosed asbestos work area to measure the overall concentration of airborne asbestos fibers in the work area.

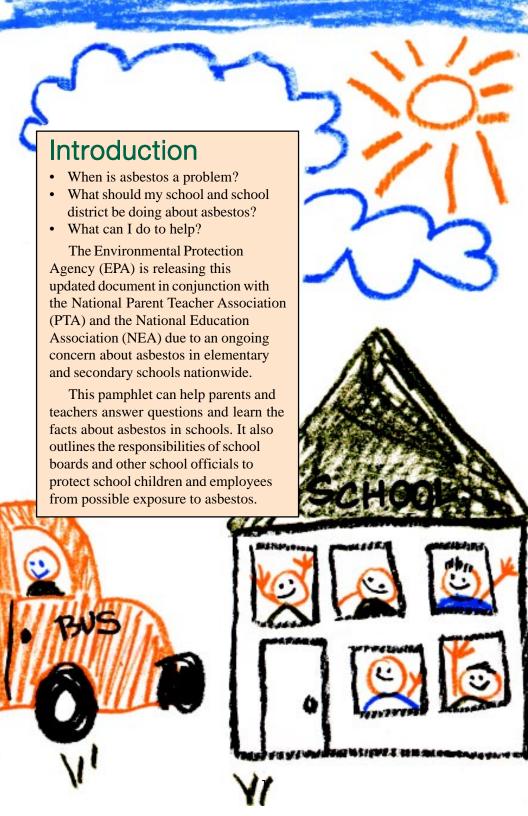




Office of Pollution Prevention and Toxics

The ABCs
Of Asbestos
In Schools

Aa Bb Cc Dd Ee Ff GgHh I j Today's Lesson: Asbestos



Aa Bb Cc Dd Ee Ff G

The Asbestos Issue

sbestos fibers can cause serious health problems. If inhaled, they can disrupt the normal functioning of the lungs. Three specific diseases – asbestosis, lung cancer, and another cancer known as mesothelioma – have been linked to asbestos exposure. These diseases do not develop immediately after inhalation of asbestos fibers; it may be 20 years or more before symptoms appear.

In general, as with cigarette smoking, the more asbestos fibers a person inhales, the greater the risk of developing an asbestos-related disease. The most severe health problems from asbestos exposure have been experienced by some workers who held jobs in industries such as shipbuilding, where they were exposed to very high levels of asbestos in the air. These employees worked directly with asbestos materials on a regular basis as a part of their jobs. Much uncertainty surrounds the risk from

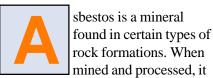
exposure to low levels of asbestos fibers.

Nevertheless, the risk of school children being exposed to even low levels of asbestos is a concern. Acting on this concern, Congress passed the Asbestos Hazard Emergency Response Act (AHERA) in 1986 to protect school children and school employees from exposure to asbestos in school buildings. This pamphlet describes key parts of these federal asbestos requirements for schools.



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What Exactly Is Asbestos?



takes the form of very small fibers which are usually invisible to the naked eye. A typical asbestos fiber is 1,200 times smaller than a strand of human hair. These individual fibers are generally mixed with a material which binds them together so that they can be used in many different products. Because the fibers are so small and light, they can remain in the air for many hours if they are released from asbestos-containing material. This increases the chance that someone will inhale them.

Asbestos became a popular commercial product because it is strong, won't burn, resists corrosion, and insulates well. Its commercial use in the United States began in the early 1900s, when it was used as insulation in steam engines. Since then asbestos has been used to create about 3,000 different products, including insulation and fireproofing. The peak years of asbestos use in schools were from World War II until the 1970s.



Where Is Asbestos Likely to Be Found?



PA estimates that there are asbestos-containing materials in most of the nation's primary,

secondary and charter schools. Asbestos is most commonly used in schools as insulation and in building materials. It has also been used in floor and ceiling tile, cement asbestos pipe, corrugated paper pipe wrap, acoustical and decorative insulation, pipe and boiler insulation, and spray-applied fireproofing. The fluffy white substance you may find above a dropped ceiling, for example, is one type of spray-applied material. The amount of asbestos in

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What Is the Government Doing about Asbestos In Schools?

he federal government has been regulating asbestos for a number of years. Progress is being made to limit the uses of asbestos and to identify substitute materials.

AHERA required EPA to develop regulations creating a comprehensive framework for dealing with asbestos in public and nonprofit private elementary and secondary schools. The regulations were published on October 30, 1987.

The AHERA schools rule requires all public school districts and private schools, known as local education agencies or LEAs, to inspect all school buildings for both friable and nonfriable asbestos; to develop plans to manage asbestos in schools; and to carry out the plans in a timely fashion. The rule also provides an opportunity for parents, teachers, and other

school employees to become familiar with and involved in their school's asbestos management program. School officials are required to notify parent, teacher and employee groups about asbestos-related activities.

EPA also has established an asbestos-in-schools assistance program. Through its Headquarters office in Washington, D.C., and ten Regional offices, EPA provides direct technical assistance to help thousands of school officials and workers understand asbestos issues. EPA is updating older asbestos publications and plans to release new materials as they become available. For more information contact your regional asbestos coordinator, the TSCA Hotline at (202) 554-1404 or the asbestos hotline at (800) 471-7127. You can also visit our website at http:// www.epa.gov/asbestos/ asbestos in schools.html.

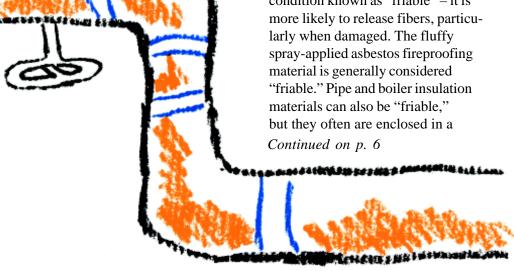
Aa Bb Cc Dd Ee Ff G

these products varies widely, from less than 1 to 100 percent, depending on the use. Pipe and boiler insulation typically contains more asbestos than other building materials. The precise amount of asbestos in a product cannot always be determined from labels - since most products used in the past were not labeled – or by asking the manufacturer. Instead, positive identification of asbestos requires analysis of samples by a qualified laboratory.

When Is Asbestos a Problem?

ntact and undisturbed asbestos materials generally do not pose a health risk. Asbestos materials, however, can become hazardous when, due to damage or deterioration over time, they release fibers. If the fibers are inhaled, they can lead to health problems.

The potential for an asbestoscontaining material to release fibers depends primarily on its condition. If the material, when dry, can be crumbled by hand pressure – a condition known as "friable" - it is spray-applied asbestos fireproofing material is generally considered materials can also be "friable." but they often are enclosed in a



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protective casing which prevents fiber release unless the casing is damaged. Some materials, which are considered "nonfriable," such as vinyl-asbestos floor tile, can also release fibers when sanded, sawed or otherwise disturbed.

Materials such as asbestos cement pipe can release asbestos fibers if they are broken or crushed when buildings are demolished, renovated or repaired.

What Are the Proper Methods for Managing Asbestos?



ost asbestos-containing material can be properly managed where it is. In fact,

asbestos that is managed properly and maintained in good condition appears to pose *relatively little risk* to students and school employees. Accordingly, the AHERA schools rule rarely requires the removal of asbestos materials.

Proper asbestos management begins with a comprehensive inspection by qualified, trained and experienced inspectors, accredited through an EPA or state-approved training course. Inspecting the condition of asbestos materials – initially with AHERA-accredited inspectors and at least semi-annually with trained custodial or maintenance staff – is extremely important so that changes in the material's condition, such as

damage or deterioration, can be detected and corrected before the condition worsens. Sometimes normal school or maintenance activities can damage asbestos material and cause fiber release, particularly if the material is "friable." A thorough initial inspection and regular surveillance can prevent accidental exposure to high levels of asbestos fibers.

The methods (see page 7), in AHERA terminology, are asbestos "response actions." The last three methods of response actions – encapsulation, enclosure, and removal – and sometimes the second method – repair – must be done by accredited asbestos professionals.

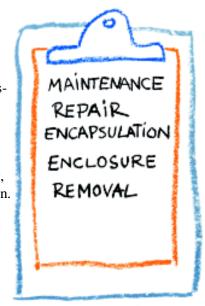
The final response action, asbestos removal, is generally necessary only when the material damage is extensive and severe,

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How To Respond?

Proper methods for dealing with asbestos are:

- Developing and carrying out a special maintenance plan to insure that asbestoscontaining materials are kept in good condition. This is the most common method when the materials are in good condition at the time of initial inspection.
- Repairing damaged pipe or boiler covering, which is known as thermal system insulation.
- Spraying the material with a sealant to prevent fiber release – a process called encapsulation.
- Placing a barrier around the materials, which is known as an *enclosure*.
- Removing asbestos under special procedures.



and other actions will not control fiber release. Although the AHERA schools rule does not prohibit schools from removing any asbestos materials, removal decisions should not be made lightly. An ill-conceived or poorly conducted removal can actually *increase* rather than eliminate

risk. Consequently, all school removal projects must be designed, supervised, and conducted by accredited professionals and should be performed in accordance with state-of-the-art procedures. In addition, schools may wish to hire an experienced and qualified project monitor to

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oversee the asbestos contractor's work to make sure the removal is conducted safely.

Only an AHERA-accredited management planner – an asbestos professional with proper training, qualifications, and experience – is authorized to advise school officials on which response action is appropriate for a particular situation. The final selection of the proper method is up to school officials after they receive the advice of the school's accredited management planner.

What Should My School & School District Be Doing?

U

nder the AHERA schools rule, each local education agency (LEA, which

means a school district or private school) must take the following asbestos-related actions:

- **1** Designate and train a person to oversee asbestos-related activities in the school system.
- **2** Inspect *every* school building for "friable" and "nonfriable" asbestoscontaining building materials.
- **3** Prepare a management plan for managing asbestos and controlling exposure in each school.
- **4** Consult with accredited inspection and management professionals

to identify and carry out whatever asbestos actions are necessary and appropriate to protect health and the environment. These actions or methods must be documented in the management plan.

- **5** Notify the public about the asbestos inspection and the availability of the asbestos management plan for review.
- **6** Use only properly accredited persons to conduct inspections, to develop the asbestos management plan, and to carry out the appropriate response actions.
- **7** Keep records of all asbestos related activities in the plan and make them available for public review.

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What Does the LEA Designated Person Do?

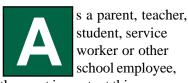
School officials may choose a consultant or one of their own employees to oversee their asbestos program. This designated person must meet certain training requirements, and serves as the single point of contact for public information about asbestos-related activities in the LEA. He or she is responsible for:

- Ensuring that initial asbestos inspections, re-inspections every three years, and semiannual surveillance activities are conducted properly by qualified personnel.
- Including results of the inspection in the management plan.
 The plan must identify all asbestos-containing building materials found in schools and recommend actions for dealing with asbestos hazards.
- Preparing a management plan (for schools built after October 12, 1988) for submission to the appropriate state Agency prior to the school being used as a school building. The management plan should be maintained and updated with records of response actions, periodic

- surveillance of asbestos containing materials (ACM) and all re-inspections.
- Making sure that custodial and maintenance workers receive required safety training and information about the location of asbestos-containing materials in their school.
 Warning labels must be posted in all routine maintenance areas, such as boiler rooms, where asbestos-containing building materials are found.
- Ensuring that response actions specified in the management plan are carried out according to the plan's timetables. The regulations require that all LEAs were to begin to carry out their management plans no later than July 9, 1989.
- Seeing that all asbestos records required by the regulations are accurately maintained.
- Informing all teacher, parent and employee organizations at least once a year about the asbestos activities in each school and about the availability of the management plan for their review.

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What Can I Do to Help?



the most important thing you can do first is to learn about your school's asbestos activities. As you do so, remember that the mere presence of asbestos in a school doesn't necessarily mean that the health of its occupants is endangered. Again, asbestos that is managed properly and maintained in good condition poses relatively little risk. Federal regulations do not require the removal of all friable asbestos from schools until the building is demolished. In fact, during the life of the building, other methods of dealing with the material are often preferable to removal.

In those cases when removing asbestos *is* determined to be the appropriate

decision, the work must be done under strict controls by trained, qualified and experienced asbestos professionals who are properly accredited under AHERA.

Step One: Awareness

Your first step is to make sure your school has prepared an asbestos management plan as required by AHERA. By becoming familiar with this plan, you will know if asbestos materials are in the school, what plans the school has for managing this asbestos, and when these activities are scheduled to occur.

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Step Two: Minimize Disturbance

There are several simple things you can do to minimize your exposure to asbestos. The most important one is to find out which materials in your school contain asbestos; you should be able to get this information from your LEA's designated person or from the school's management plan.

Once you know where asbestos is, use special care to insure that any day-to-day activities, such as repair or maintenance work, do not disturb the material. In fact, special training is required to participate in any maintenance activities which might disturb asbestos. In schools, asbestoscontaining materials can also be damaged by student activities. For example, an asbestos ceiling in a gym may be disturbed if basketballs or other

objects are thrown up against it. Students and others who use the gym should be warned to avoid such activities.



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Who Is Responsible for Making AHERA Work?

ll of us are responsible. Making the AHERA schools rule work to protect the

nation's school children and employees is a joint responsibility of the LEA and its officials, school employees, parents, students, federal and state governments, and asbestos control professionals.

EPA conducts compliance inspections of a sample of schools each year to make sure they are obeying the law. The Agency is responsible for insuring that schools comply with AHERA and it will investigate reported violations. Since the AHERA schools rule is intentionally designed to involve parent, teacher and other school employee organizations, it is important that *you* work with your school to make sure that its asbestos program is properly conducted.



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Where Can I Get More Information?

nder AHERA,

citizens have the opportunity to become informed about asbestos activities in their schools. If you have a question or concern about those activities, you should first contact your LEA designated person. This person knows the most about the asbestos situation in your school. When you find out who this person is, ask him or her

what steps your school has taken,

and will continue to take, to meet

the requirements of the AHERA

schools rule.

The LEA designated person also can tell you which agency in your state government is responsible for state AHERA activities. The same agency usually is responsible for reviewing the LEA's asbestos management plan. This LEA designated person also should be aware of any local asbestos control requirements.

State AHERA designees also are a good source of information.
These officials can help you better understand the AHERA schools rule.



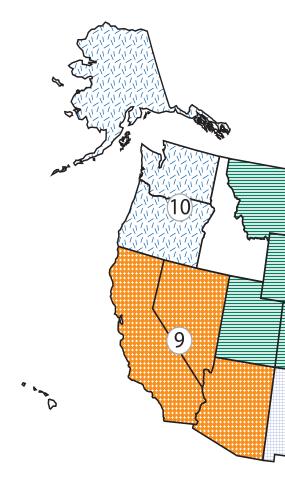
and can answer questions about your school's asbestos activities.

You also can contact your EPA regional office. There are ten EPA regional offices around the country, and each one has a Regional Asbestos Coordinator (RAC). Their addresses and phone numbers are listed at the end of this pamphlet. School employees cannot be penalized for contacting EPA or the appropriate state agency to discuss their concerns about a school's asbestos program.

Local, state, and national parent and teacher organizations are other good sources of information about asbestos in schools. Many of these groups worked with EPA in developing the AHERA schools rule, and some have started their own educational efforts to improve understanding of the AHERA requirements and proper asbestos control practices. The addresses and phone numbers of the national offices of PTA and NEA are listed at the end of this pamphlet.

The EPA Toxic Substances Control Act (TSCA) Hotline is available to answer your questions about the new AHERA regulations and about asbestos in general. You can obtain a variety of information by calling the TSCA Hotline at (202) 554-1404 or the asbestos hotline at (800) 471-7127. You can also visit our website at http://www.epa.gov/asbestos/asbestos_in_schools.html.

Finally, EPA has an asbestos ombudsman to help citizens with asbestos-in-schools issues, questions, and complaints. This office can be reached through a toll-free number at (800) 368-5888.



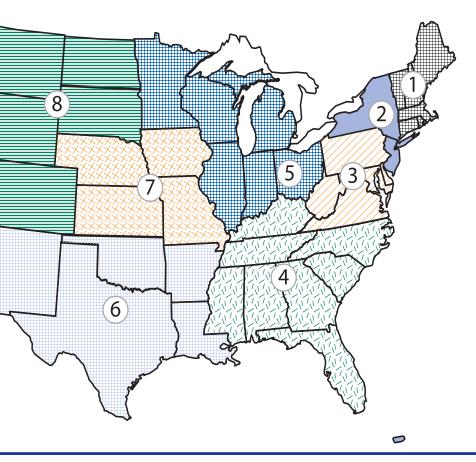
EPA Regions

EPA Region 1

One Congress Street Suite 1100 Boston, MA 02114 Phone: (617) 918-1111 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)

EPA Region 2

Air Branch 290 Broadway, 21st Floor New York, NY 10007 Phone: (212) 637-3000 (New Jersey, New York, Puerto Rico, and Virgin Islands)



EPA Region 3

1650 Arch Street Philadelphia, PA 19103 Phone: (215) 814-5000 (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia)

EPA Region 4

461 Forsyth Street, SW Atlanta, GA 30303 Phone: (404) 562-9900 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee)

EPA Region 5

77 West Jackson Blvd. Chicago, IL 60604 Phone: (312) 353-2000 (Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin)

EPA Region 6

1445 Ross Avenue Dallas, TX 75202 Phone: (214) 665-2200 (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas)

EPA Region 7

901 N. 5th Street Kansas City, KS 66101 Phone: (913) 551-7003 (Iowa, Kansas, Missouri, and Nebraska)

EPA Region 8

999 – 18th Street, Suite 300 Denver, CO 80202 Phone: (303) 312-6312 (Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming)

EPA Region 9

75 Hawthorne Street San Francisco, CA 94105 Phone: (415) 947-8000 (Arizona, California, Hawaii, Nevada, American Samoa, and Guam)

EPA Region 10

1200 Sixth Street Seattle, WA 98101 Phone: (206) 553-1200 (Alaska, Idaho, Oregon, and Washington)

National Parent Teacher Association

National PTA 330 N. Wabash Avenue Suite 2100 Chicago, IL 60611 1-800-307-4782

National PTA DC Office 1090 Vermont Avenue, NW Suite 1200 Washington, DC 20005 (202) 289-6790

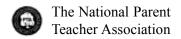
Hotline: 1-888-425-5537

National Education Association

NEA 1201 16th Street, NW Washington, DC 20036 Division of Government Relations (202) 822-7300 or Office of General Counsel (202) 822-7035

Prepared by the U.S. Environmental Protection Agency

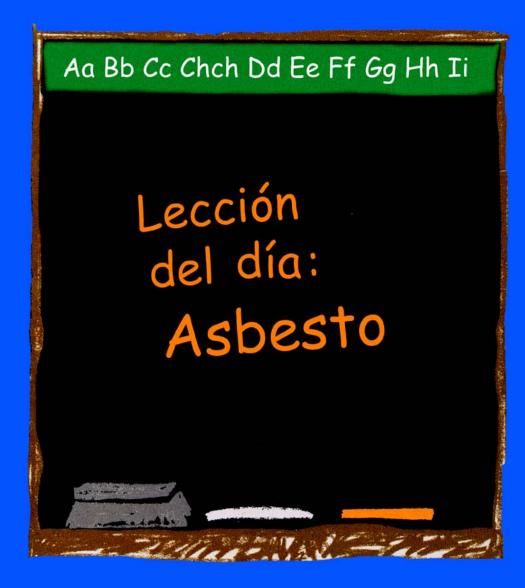
nea The National Education Association





Oficina de Prevención de la Contaminación y Sustancias Tóxicas

El ABC del Asbesto en las Escuelas





Reciclado/Reciclable

Impreso con tinta con base de aceite vegetal en papel reciclado (Mínimo 50% postconsumidor) Proceso libre de cloro

Introducción

- ¿Cuándo es el asbesto un problema?
- ¿Qué debería estar haciendo mi escuela y distrito escolar acerca del asbesto?
- ¿Qué puedo hacer yo para ayudar?

La Agencia de Protección Ambiental de los Estados Unidos (EPA, por sus siglas en inglés) está publicando una versión revisada de este documento conjuntamente con la Asociación Nacional de Padres y Maestros (PTA, por sus siglas en inglés) y la Asociación Nacional para la Educación (NEA, por sus siglas en inglés) debido a la preocupación que existe en la actualidad a nivel nacional sobre el asbesto en las escuelas elementales v secundarias.

Este panfleto puede ayudarle a los padres de familia y maestros a responder a las preguntas y aprender sobre aspectos relacionados con el asbesto en las escue-las. Este panfleto también identifica las responsabilidades de las juntas escolares y demás funcionarios escolares para proteger a los niños y empleados de las escuelas de una posible exposición al asbesto.





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El asbesto

as fibras de asbesto pueden causar problemas serios de salud. Si se inhalan, pueden interferir en el funcionamiento normal de los pulmones. Tres enfermedades específicas—asbestosis, cáncer del pulmón y otro tipo de cáncer conocido como mesotelioma-han sido relacionadas con la exposición al asbesto. Estas enfermedades no se desarrollan inmediatamente después de haber inhalado fibras de asbesto y en algunas ocasiones pueden pasar 20 años antes de que aparezcan los síntomas.

En general, igual que cuando se fuman cigarrillos, cuantas más fibras sean inhaladas por una persona, mayor será el riesgo de que esa persona desarrolle una enfermedad relacionada con el asbesto. Los problemas más graves causados por la exposición al asbesto han sido experimentados por algunos trabajadores que laboraron en industrias donde estuvieron expuestos a niveles muy altos de asbesto en el aire (por ejemplo, trabajadores en la industria de fabricación de barcos). Estos empleados trabajaron, de manera regular en el desempeño de sus

car-gos, directamente con materiales de asbesto. Hay una gran incertidumbre en cuanto al riesgo causado por la exposición de bajo nivel a las fibras de asbesto.

No obstante, es preocupante el riesgo que los niños pueden enfrentar debido a la presencia de asbesto en las escuelas, aún cuando los niveles de asbesto son bajos. Motivados por esta preocupación, el Congreso aprobó el Acta para la Respuesta de Emergencia a los Peligros de Asbesto (Asbestos Hazard Emergency Response Act - AHERA) en 1986, con el propósito de proteger a niños y empleados escolares de la exposición al asbesto en edificios escolares.

Este panfleto describe los requisitos clave de este mandato federal relacionados al asbesto en las escuelas.

e Ff Gg Hh Ii Jj Kk LI LIII

¿Qué es exactamente el asbesto?

l asbesto es un mineral encontrado en ciertos tipos de formaciones rocosas. Cuando se

extrae de la mina y se procesa, adquiere la forma de fibras muy pequeñas, generalmente invisibles al ojo humano. Una fibra típica de asbesto es 1,200 veces más pequeña que un cabello humano. Estas fibras individuales generalmente se mezclan con algún material que las aglutina, de tal forma que puedan usarse en muchos productos diferentes. Debido a que las fibras son tan pequeñas y ligeras, pueden permanecer flotando en el aire durante muchas horas luego der ser liberadas de los materiales que las contienen. Ésto aumenta la posibilidad de que alguien las inhale.

El asbesto se convirtió en un producto comercialmente atractivo debido a que es fuerte, no se quema, resiste la corrosión y es un buen aislante. En los Estados Unidos, su uso comercial comenzó alrededor del año 1900, cuando se usó como aislamiento en las máquinas de



vapor. Desde entonces, se ha usado para crear unos 3,000 productos diferentes, incluyendo productos aislantes y a prueba de fuego. El apogeo en el uso de asbesto en las escuelas se dió de la Segunda Guerra Mundial hasta los años 70.

¿Dónde hay posibilidad de encontrar asbesto?

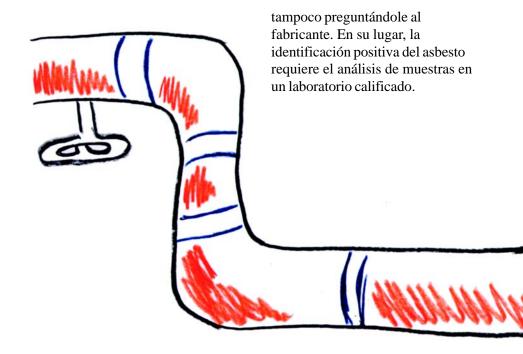
a EPA estima que existen materiales que contienen asbesto en la mayoría de las escuelas

primarias, secundarias y de tipo "charter" de la nación. El asbesto se usa generalmente en las escuelas

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como aislante y en materiales de construcción. También se ha usado en baldosas para pisos y cielorrasos, en tuberías de cemento-asbesto, en papel corrugado para envolver, en aislamiento acústico y decorativo, en aislamiento de tuberías y calderas y en aplicaciones por aspersión para prevención contra fuego. Por ejemplo, la pelusa blanca que usted puede ver cuando una pieza de cielorraso se ha desprendido es un tipo de

material de asbesto aplicado por aspersión. La cantidad de asbesto en estos productos varía mucho, desde menos de 1 por ciento hasta un 100 por ciento, dependiendo del uso dado. El aislamiento de tuberías y calderas generalmente contiene más asbesto que otros tipos de materiales de construcción. La cantidad exacta de asbesto en un producto no siempre se puede determinar a partir de la etiqueta—ya que la mayoría de los productos usados



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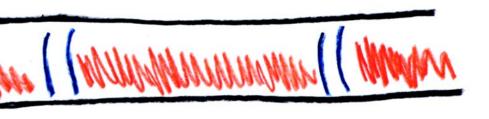
¿Cuándo constituye el asbesto un problema?

os materiales de asbesto intactos e inalterados generalmente no

constituyen un riesgo para la salud. No obstante, estos materiales pueden ser peligrosos una vez sufren daño o deterioro con el tiempo ya que dejan escapar fibras. Si estas fibras son inhaladas, pueden resultar en problemas de salud.

La posibilidad de que un material que contiene asbesto deje escapar sus fibras depende principalmente de su condición. Si el material en estado seco puede romperse con la mano—condición denominada como

"desmenuzable"—es probable que suelte fibras, sobre todo cuando sufre daño. El material de asbesto aplicado por aspersión para prevención contra fuego generalmente se considera desmenuzable. Los materiales para aislamiento de tuberías y calderas también pueden ser desmenuzables, pero a menudo están encerrados en una cubierta protectora que evita que las fibras sean liberadas, a menos que tal cubierta protectora se dañe. Algunos materiales considerados como "no desmenuzables," tales como las baldosas para piso de asbestovinilo, pueden liberar fibras cuando se lijan, se cortan o se alteran de alguna manera. Otros materiales, tales como las tuberías de cemento-asbesto, pueden dejar escapar fibras de asbesto si se rompen o son despedazados cuando un edificio es demolido, renovado o reparado.



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¿Qué está haciendo el gobierno sobre el asbesto en las escuelas?

urante varios años, el gobierno federal ha estado regulando el asbesto. Se ha logrado algún progreso para limitar su uso, así como para identificar materiales que lo sustituyan.

AHERA requería que la EPA elaborara los reglamentos necesarios para formar un sistema adecuado para la gestión del asbesto en escuelas primarias y secundarias, tanto públicas como privadas sin fines de lucro. La reglamentación se publicó el 30 de octubre de 1987.

La norma para escuelas de AHERA requiere que todos los distritos escolares públicos y las escuelas privadas, conocidos como agencias locales de educación o LEAs (por sus siglas en inglés), inspeccionen todos los edificios escolares en busca de asbesto desmenuzable y no desmenuzable, elaboren planes de manejo del asbesto en las escuelas y lleven a cabo esos planes de manera oportuna.

La norma también le da oportunidad a los padres de familia, maestros y demás empleados escolares para que se familiaricen y se involucren en el programa de manejo del asbesto en sus escuelas. Los funcionarios escolares deben notificar a los padres de familia, maestros y demás grupos de empleados sobre las actividades relacionadas con el asbesto.

La EPA también ha establecido un programa de asistencia para el asbesto en las escuelas. A través de sus oficinas centrales en Washington, DC y diez oficinas regionales, la EPA

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provee asistencia técnica para ayudar directamente a miles de funcionarios escolares y trabajadores a obtener un mejor entendimiento en todo lo relacionado con el asbesto. La EPA está revisando publicaciones de asbesto en existencia y espera publicar materiales nuevos según éstos estén disponibles. Para más información, favor comunicarse con su Coordinador Regional de

Asbesto, la Línea de Información ("Hotline") para Asuntos Relacionados a la Ley de Control de Sustancias Tóxicas (TSCA, por sus siglas en inglés) al (202) 554-1409 o a la Línea de Información gratuita para el Asbesto al (800) 471-7127. También puede visitar nuestra página de Internet en: http://www.epa.gov/asbestos/asbestos_in_schools.html.



-Aa Bb Cc Chch Dd E

¿Cuáles son los métodos adecuados para manejar el asbesto?

a mayoría de los materiales que contienen asbesto pueden manejarse

adecuadamente en el sitio donde se encuentran. De hecho, el asbesto que es manejado apropiadamente y mantenido en buenas condiciones parece presentar *relativamente* poco riesgo para estudiantes o personal de la escuela. Por lo tanto, la norma para escuelas de AHERA raramente requiere que los materiales de asbesto sean removidos.

El manejo adecuado del asbesto comienza con una inspección a fondo realizada por inspectores calificados, entrenados y con experiencia, acreditados a través de cursos de capacitación provistos por la EPA o el estado. La inspección de la condición de los materiales fabricados con asbesto—inicialmente con inspectores acreditados bajo AHERA y luego por lo menos cada seis meses por personal de custodia o por el personal de mantenimiento—es de gran importancia para que los

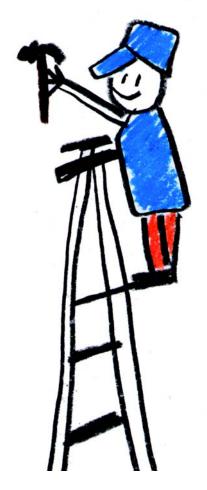
cambios en las condiciones del material, tales como daños o deterioro, puedan detectarse y corregirse antes de que esa condición se agrave. A veces las actividades normales de la escuela o el mismo mantenimiento pueden dañar el material de asbesto y causar que las fibras se liberen, particularmente si el material es desmenuzable. Una inspección inicial a fondo y observación a intervalos regulares pueden evitar que haya una exposición accidental a niveles altos de fibras de asbesto.

Los métodos adecuados para manejar el asbesto (ver página 10) se denominan "acciones de respuesta" para asbesto en la terminología empleada por AHERA. Los últimos tres métodos en las acciones de respuesta— encapsulación, confinamiento y remoción—y a veces el segundo método—reparación—deben ser llevados a cabo por profesionales acreditados en el manejo de asbesto.

La acción de respuesta final, la remoción del asbesto, generalmente es necesaria solamente cuando el daño en el material sea grande y severo y ninguna otra acción controlaría la liberación de fibras.

A pesar de que la norma para escuelas de AHERA no prohibe que las escuelas remuevan los materiales de asbesto, la decisión de remover estos materiales no debe tomarse a la ligera. La remoción mal concebida o realizada de manera inadecuada en realidad puede aumentar el riesgo, en lugar de eliminarlo. Por lo tanto, todos los proyectos para remover el asbesto en las escuelas deben ser diseñados, supervisados y llevados a cabo por profesionales acreditados y deben realizarse de acuerdo con los procedimientos más avanzados. Además, las escuelas pueden optar por contratar a un administrador de proyecto experimentado y calificado para que supervise el trabajo del contratista y asegure que el trabajo de remoción es realizado de manera segura.

Solamente un gestor de planificación acreditado bajo AHERA—un profesional en asbesto con el debido entrenamiento, calificación y experiencia—está autorizado para asesorar a los funcionarios escolares sobre la acción de respuesta más adecuada para cada situación particular. La selección final del método más adecuado quedará a criterio de los funcionarios de la escuela después de recibir la asesoría del gestor de planificación acreditado.



¿Cómo responder?

Métodos adecuados para manejar el asbesto son:

- Elaborar y llevar a cabo un plan especial de mantenimiento que asegure que los materiales que contienen asbesto están en buenas condiciones. Éste es el método más común cuando los materiales están en buenas condiciones al momento de la inspección inicial.
- Reparación de tuberías o cubiertas de calderas conocidas como aislamiento del sistema térmico—dañadas.



- Rociar el material con algún agente sellador para evitar la liberación de fibras—proceso conocido como *encapsulación*.
- Colocar una barrera alrededor de los materiales, lo que se conoce como *confinamiento*.
- Remover el asbesto—bajo procedimientos especiales.

¿Qué debería estar haciendo mi escuela y mi distrito escolar?

ajo la Norma para
Escuelas de AHERA,
cada una de las
agencias escolares
locales (LEAs, es decir, un distrito

escolar o una escuela privada) deberá tomar en cuenta las siguientes acciones en relación con el asbesto:

Nombrar y entrenar a una persona para que supervise las actividades relacionadas con el asbesto en el sistema escolar.

Inspeccionar *cada* edificio escolar en busca de materiales de construcción que contengan asbesto desmenuzable o no desmenuzable

Preparar un plan de manejo para manejar el asbesto y controlar la exposición a asbesto en cada escuela. Consultar con profesionales acreditados para inspección y gestión para identificar y llevar a cabo cualquier acción que sea necesaria y adecuada para proteger la salud y el ambiente. Estas acciones o métodos deberán documentarse en el plan de manejo.

Notificar al público sobre la inspección de asbesto y la disponibilidad del plan de manejo del asbesto para su revisión.

Utilizar solamente los servicios de personas debidamente acreditadas para realizar inspecciones, elaborar el plan de manejo del asbesto y llevar a cabo las acciones de respuesta adecuadas.

Mantener registros de todas las actividades relacionadas con el asbesto en el plan y tenerlos disponibles para revisión del público.

¿Qué hace la persona nombrada por la LEA?

Los funcionarios escolares pueden seleccionar a un consultor o a uno de sus propios empleados para supervisar su programa de asbesto. Esta persona debe cumplir con ciertos requisitos de entrenamiento y actuará como el único punto de contacto para información al público sobre actividades relacionadas con el asbesto en la LEA. Esta persona será responsable de:

- Asegurar que las inspecciones iniciales de asbesto, las re-inspecciones cada tres años y las actividades de observación semestrales se llevan a cabo adecuadamente por personal calificado.
- Incluir los resultados de la inspección en el plan de manejo. El plan debe identificar todos los

- materiales de construcción que contienen asbesto encontrados en las escuelas y recomendar acciones para manejar peligros por asbesto.
- Preparar un plan de manejo (para escuelas construidas después del 12 de octubre de 1988) para que éste sea sometido a la agencia estatal apropiada antes de que la estructura sea utilizada como un edificio escolar. El plan de manejo debe mantenerse y ser revisado en base a documentación de acciones de respuesta, observación periódica de material que contiene asbesto (ACM, por sus siglas en inglés) y todas las re-inspecciones.
- Asegurarse que los custodios y trabajadores de mantenimiento reciben todo el entrenamiento requerido para

seguridad, así como información acerca de la localización de los materiales que contienen asbesto en su escuela. Se deben colocar rótulos de advertencia en todas las áreas de mantenimiento rutinario, tales como cuartos de calderas, donde puedan encontrarse materiales de construcción que contienen asbesto.

Asegurarse que las acciones de respuesta especificadas en el plan de manejo se lleven a cabo según el calendario contenido en el plan. Los reglamentos requieren que todas las LEAs deberían haber comenzado a cumplir con sus planes de manejo a más tardar el 9 de julio de 1989.



- Velar por que todos los registros relacionados con el asbesto requeridos por los reglamentos sean llevados rigurosamente.
- Informar a todas las organizaciones de maestros, padres y empleados escolares, por lo menos una vez al año, sobre actividades el relacionadas con el asbesto en cada escuela y sobre la disponibilidad del plan de manejo para que pueda ser revisado.

¿Qué puedo hacer para ayudar?

omo padre de familia, maestro, estudiante, trabajador o cualquier otro tipo de empleado

escolar, lo más importante que usted puede hacer primero es informarse acerca de las actividades relacionadas con el asbesto que se llevan a cabo en la escuela. Al hacerlo, recuerde que la presencia de asbesto en una escuela por sí misma no significa que la salud de sus ocupantes está en peligro. Recalcamos que el asbesto que es manejado adecuadamente y mantenido en buenas condiciones presenta un riesgo relativamente pequeño. Los reglamentos federales no exigen la remoción de todo el asbesto desmenuzable de las escuelas sino hasta que el edificio sea demolido. De hecho, durante la vida del edificio, a menudo se prefieren otros métodos para el manejo del material antes de removerlo.

En los casos donde se determina que la remoción *es* la



decisión más adecuada, el trabajo debe realizarse bajo el estricto control de profesionales entrenados, calificados y experimentados, debidamente acreditados bajo AHERA.

Paso Uno: conocimiento

Su primer paso será asegurarse que su escuela ha preparado un plan de manejo del asbesto, tal como lo requiere AHERA. Al familiarizarse con este plan, usted sabrá si en la escuela hay materiales con asbesto, qué planes tiene la escuela para manejar estos materiales y cuándo van a realizarse las actividades.

Paso Dos: disminuya las perturbaciones

Hay varias cosas sencillas que usted puede hacer para disminuir su exposición al asbesto. La más importante es determinar qué materiales en su escuela contienen asbesto. Esta información podrá obtenerla de la persona nombrada por su LEA o en el plan de manejo de la escuela.

Una vez que usted sabe dónde está el asbesto, tenga mucho cuidado en asegurarse que las actividades cotidianas, tales como reparaciones o trabajos de mantenimiento, no vayan a perturbar el material. De hecho, se requiere entrenamiento especializado para poder participar en cualquier actividad de mantenimiento que pueda perturbar el asbesto. En las escuelas, los materiales que contienen asbesto también se pueden dañar a causa de las actividades de los estudiantes. Por ejemplo, un cielo raso de un gimnasio puede perturbarse si se le lanzan bolas de baloncesto u otros objetos. A los estudiantes y otras personas que hacen uso del gimnasio deberá advertírseles que deben evitar tal tipo de actividades.

¿Quién es responsable de hacer que AHERA funcione?

odos nosotros somos responsables. Hacer que la norma para escuelas de AHERA

funcione para proteger a niños y empleados de las escuelas de la nación es una responsabilidad compartida del LEA y sus funcionarios, empleados escolares, padres de familia, estudiantes, gobierno federal y estatal y profesionales a cargo del con

La EPA lleva a cabo inspecciones de cumplimiento en un número limitado de escuelas cada año con el fin de asegurar que se está obedeciendo la ley. La EPA es responsable de asegurar que las escuelas cumplen con lo que dispone AHERA e investigará cualquier violación que se reporte.

Debido a que la norma para escuelas de AHERA ha sido diseñada intencionalmente para involucrar a organizaciones de padres, maestros y empleados escolares, es importante que *usted* trabaje con su escuela para asegurarse que el programa de asbesto se lleva a cabo de manera adecuada.



¿Dónde puedo obtener

más información?

ajo AHERA, todo

ciudadano tiene la oportunidad de informarse sobre actividades relacionadas con el asbesto en su escuela. Si usted tiene una pregunta o inquietud acerca de esas actividades, primero debe contactar a la persona nombrada por su LEA. Ésta es la persona que mejor conoce la situación del asbesto en su escuela. Cuando sepa quién es esta persona, pregúntele sobre los pasos que su escuela ha tomado y continuará tomando para cumplir con los requisitos de la norma para escuelas de AHERA.

La persona nombrada por su LEA también le puede decir cuál agencia de su gobierno estatal tiene la responsabilidad de las actividades de AHERA. Generalmente, es la misma agencia la que tiene la responsabilidad de revisar el plan de manejo del asbesto de la LEA. Esta persona también deberá estar informada sobre cualquier requisito local para el control del asbesto.

Las personas nombradas por el estado para actividades de AHERA también son una buena



fuente de información. Estos funcionarios pueden ayudarle a comprender mejor la Norma para Escuelas de AHERA y a darle respuesta a preguntas sobre las actividades relacionadas con el asbesto en su escuela.

Usted también puede contactar a su oficina regional de la EPA. Existen diez oficinas regionales de la EPA en todo el país y cada una tiene un Coordinador Regional de Asbesto (RAC, por sus siglas en inglés). Sus direcciones y números de teléfono se ofrecen al final de este panfleto. Los empleados de una escuela no pueden ser penalizados por contactar a la EPA o la agencia estatal correspondiente para discutir sus inquietudes acerca de los programas de asbesto en una escuela.

Las organizaciones locales, estatales y nacionales de padres y maestros son otras buenas fuentes de información sobre el asbesto en las escuelas. Muchos de estos grupos trabajaron con la EPA en el desarrollo de la norma para escuelas de AHERA y algunos han comenzado sus propios esfuerzos para mejorar el entendimiento de los requisitos de AHERA y las prácticas adecuadas para el control del asbesto. Las direcciones y números de teléfono de las oficinas nacionales de PTA y de NEA se ofrecen al final de este panfleto.

La Línea de Información TSCA está disponible para darle respuesta a sus preguntas sobre los reglamentos de AHERA y sobre el asbesto en general. Usted puede obtener toda una serie de información llamando a la Línea de Información de TSCA al (202) 554-1404 o a la Línea de Información gratuita de Asbesto al (800) 471-7127. También puede visitar nuestra página de Internet: http://www.epa.gov/asbestos/asbestos in schools.html.

Finalmente, la EPA tiene un mediador de asuntos de interés público ("ombudsman") que le presta ayuda a los ciudadanos en asuntos relacionados con el asbesto en las escuelas, contesta sus preguntas y escucha sus inquietudes. Usted puede comunicarse con esta oficina llamando al siguiente número sin cargo: (800) 368-5888.

Coordinadores Regionales de Asbesto

EPA - Región 1

One Congress Street Suite 1100 Boston, MA 02114 (617) 918-1111 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island y Vermont)

EPA - Región 2

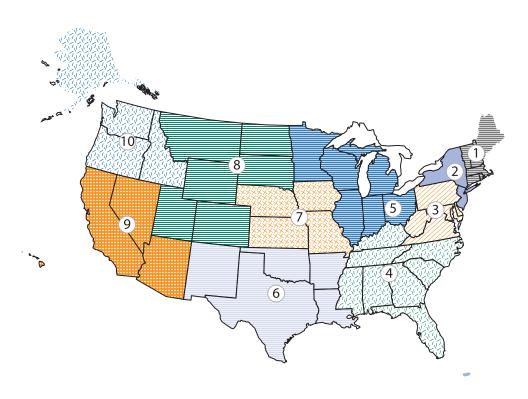
Air Branch 290 Broadway, 21st Floor New York, NY 10007 (212) 637-3000 (New Jersey, New York, Puerto Rico y Virgin Islands)

EPA - Región 3

1650 Arch Street Philadelphia, PA 19103 (215) 814-5000 (Delaware, Distrito de Columbia, Maryland, Pennsylvania, Virginia y West Virginia)

EPA - Región 4

461 Forsyth Street, S.W. Atlanta, GA 30303 (404) 562-9900 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina y Tennessee)



EPA - Región 5

77 West Jackson Boulevard Chicago, IL 60604 (312) 353-2000 (Illinois, Indiana, Michigan, Minnesota, Ohio y Wisconsin)

EPA - Región 6

1445 Ross Avenue Dallas, TX 75202 (214) 655-2000 (Arkansas, Louisiana, New Mexico, Oklahoma y Texas)

EPA - Región 7

901 N. 5th Street Kansas City, KS 66101 (913) 551-7003 (Iowa, Kansas, Missouri y Nebraska)

EPA - Región 8

999 18th Street Suite 300 Denver, CO 80202 (303) 312-6312 (Colorado, Montana, North Dakota, South Dakota, Utah y Wyoming)

EPA - Región 9

75 Hawthorne Street San Francisco, CA 94105 (415) 947-8000 (Arizona, California, Hawaii, Nevada, American Samoa y Guam)

EPA - Región 10

1200 Sixth Street Seattle, WA 98101 (206) 553-1200 (Alaska, Idaho, Oregon y Washington)

National Parent Teacher Association (Asociación Nacional de Padres y Maestros)

National PTA 330 N. Wabash Avenue Suite 2100 Chicago, IL 60611 (800) 307-4782

National PTA DC Office 1090 Vermont Avenue, N.W. Suite 1200 Washington, DC 20005 (202) 289-6790

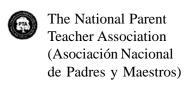
Línea de Información: (888) 425-5537

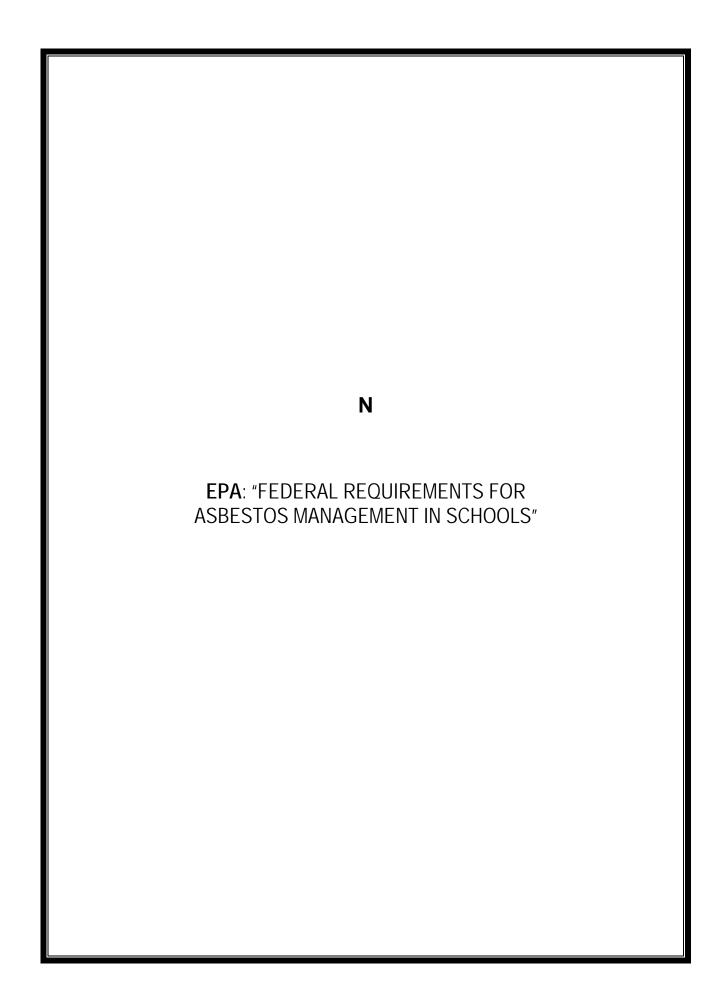
National Education Association (Asociación Nacional para la Educación)

NEA 1201 16th Street, N.W. Washington, DC 20036 Division of Government Relations (División Relaciones Gubernamentales) (202) 822-7300 o Office of General Counsel (Oficina del Asesor Legal) (202) 822-7035

Preparado por la Agencia de Protección Ambiental de los Estados Unidos

The National
Education Association
(Asociación Nacional
para la Educación)







FEDERAL REQUIREMENTS FOR ASBESTOS MANAGEMENT IN SCHOOLS

EPA Regional Asbestos Coordinators

EPA Region 1 One Congress Street Suite 1100 Boston, MA 02114

EPA Region 2 290 Broadway, 21st Floor New York, NY 10007

EPA Region 3 1650 Arch Street Philadelphia, PA 19103

EPA Region 4 61 Forsyth Street, S.W. Atlanta, GA 30303-8960

EPA Region 5 77 West Jackson Blvd. Chicago, IL 60604

EPA Region 6 1445 Ross Avenue Dallas, TX 75202

EPA Region 7 901 N. 5th Street Kansas City, KA 66101

EPA Region 8 999 - 18th Street, Suite 300 Denver, CO 80202

EPA Region 9 75 Hawthorne Street San Francisco, CA 94105

EPA Region 10 1200 Sixth Street Seattle, WA 98101 Information on Compliance with AHERA Requirements for Superintendents of Schools, Headmasters, Directors, Asbestos Inspectors & Management Planners

The Environmental Protection Agency (EPA) has developed this guidance to help Local Education Agencies (LEAs) achieve compliance with the Asbestos-Containing Materials in Schools regulation (40 CFR Part 763).

These regulations, in effect since 1986, require that public and not-for-profit non-public, elementary and secondary schools be inspected to determine the presence of asbestos-containing building materials and that asbestos management plans be developed as a result of those inspections. State requirements may vary. Contact your state agency for more information.



EPA Asbestos Line

1-800-471-7127

EPA Asbestos in Schools Website

http://www.epa.gov/asbestos/ asbestos in schools.html

Designated Person

The **Local Education Agency** (LEA) must designate a person (designated person) to ensure that the responsibilities of the LEA, as detailed in the regulations, are properly implemented.

- The LEA must verify that this individual has received proper training. The individual is not required to be a licensed asbestos consultant. There is no specific training course for the designated person; however, the EPA has developed a "Designated Person's Self-Study Guide" that details the required specific background knowledge the designated person must have. You can find this guide at http://www.epa.gov/asbestos/schools.html.
- The **Asbestos Management Plan** (AMP) for schools must include a true and correct statement signed by the designated person certifying that the general responsibilities of the LEA have been or will be met.
- In the event that the designated person leaves his or her position, the LEA must ensure that a new individual is identified and appropriately trained to serve as the designated person. The newly identified designated person must then sign the aforementioned statement of certification. The designated person must have a basic knowledge of the health effects of asbestos, the detection, identification and assessment of asbestoscontaining material, options for controlling asbestos-containing material, asbestos management programs, and relevant federal and state regulations concerning asbestos.

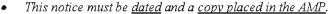
Reinspection

The LEA must retain the services of a licensed asbestos inspector or management planner to conduct a reinspection every **three** years subsequent to implementation of a management plan.

• Triennial reinspections must include an inspection of each area of every building that is leased, owned, or otherwise used as a school building.

Written Notification Regarding Availability of the AMP

At least once each school year, the LEA must provide written notification to parent, teacher, and employee organizations regarding the availability of the Abestos Management Plan and any response actions taken or planned.

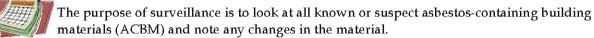


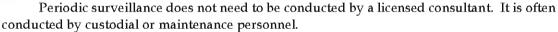
The AMP must describe the steps taken to notify parents, teachers and employee organizations. Acceptable methods of notification include placing a notice in the school handbook, mailing a letter to each household, or placing an ad in a local paper.



Periodic Surveillance

After the AMP has been implemented, the LEA must conduct periodic surveillance in each building that it leases, owns, or otherwise uses as a school building at least once every six months.







Custodial & Maintenance Training and Short-Term Worker

All maintenance and custodial staff who may work in a building that contains asbestos-containing building materials (ACBM) must receive at least two hours of asbestos awareness training whether or not they are required to work with ACBM.

Maintenance and custodial staff conducting any activities that will result in the disturbance to ACBM must receive an additional fourteen hours of training.



- The LEA must ensure that new custodial and maintenance employees are trained within sixty days after commencement of employment.
- The LEA must ensure that short-term workers who may come in contact with asbestos (e.g. utility repair workers) are informed of the location of ACBM.



Record-Keeping Requirement

The LEA must maintain records required by the regulations to be included in the Asbestos Management Plan. This includes:

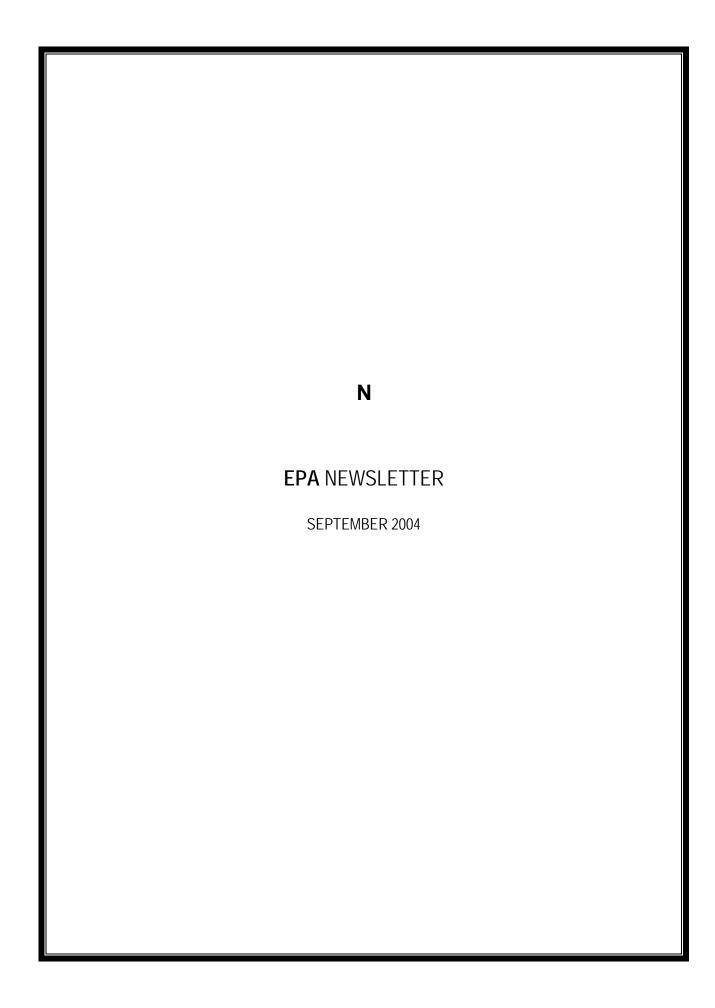
- a copy of prior inspection and/or reinspection reports;
- documentation related to the training provided to custodial and maintenance employees;
- periodic surveillance forms;
- dated statements regarding operations and maintenance activities;
- a copy of the annual notice of the management plan availability;
- a copy of all reports on response actions taken; and
- a copy of the updated management plan in each school.

Compliance/Enforcement

EPA is committed to providing assistance to LEAs to ensure compliance with regulatory requirements. While it is the goal of EPA to provide LEAs with assistance in achieving regulatory compliance voluntarily, LEAs that fail to comply with existing regulatory requirements will be subject to enforcement action. Contact your Regional Asbestos Coordinator for more information.









Enforcement Alert

Volume 7. Number 1

Office of Regulatory Enforcement

September 2004

Schools Learn to Protect Students, Staff From Exposure to Asbestos Hazards

U.S. Law Requires Inspections, Planning and Notice of Potential Danger

U.S. Environmental Protection Agency (EPA) inspections of five schools in Puerto Rico in 2002-2003 found widespread failure to protect children from exposure to asbestos. Dust was evident in

About Enforcement Alert

Enforcement Alert is published periodically by EPA's Office of Regulatory Enforcement in the Office of Enforcement and Compliance Assurance to inform and educate the public and the regulated community of key environmental enforcement issues, recent trends and significant enforcement actions.

This information should help the regulated community anticipate and prevent violations of federal environmental law. Reproduction and dissemination of this publication are encouraged. To receive this newsletter electronically, see: www.epa.gov/compliance/resources/newsletters/civil/enfalert/index.html

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Document Number: EPA 325-N-03-001

several school buildings where stucco containing asbestos had been removed improperly: significant portions of the stucco remaining in classrooms was damaged and pieces of stucco were found on a desk and a floor in one classroom. It was clear that schools were not properly collecting asbestos-containing waste material. EPA learned that in one school, a teacher and several students had removed about 2.000 square feet of asbestos-containing vinyl floor tiles. Neither the students nor the teacher were properly trained in how to do this safely and they did not wear protective gear.

In an administrative settlement reached in early 2004, the EPA imposed a \$5.6 million penalty against the Puerto Rico Department of Education for violations of the Asbestos Hazard Emergency Response Act (AHERA). The settlement calls for the Puerto Rico Department of Education (DOE) to invest the funds in a comprehensive three-year program to identify and reduce or eliminate asbestos hazards and reduce children's exposure to asbestos in over 1,500 public schools on the island.

Under the terms of the Consent Agreement, the Puerto Rico DOE will submit to EPA and the Puerto Rico Environmental Quality Board a work plan that provides for the training of personnel on AHERA requirements, the inspection of all schools and the abatement of any damaged asbestos-containing



What is asbestos?

Asbestos is a naturally occurring mineral fiber, once widely used in building materials for its thermal insulating properties and fire resistance. Today, there is a popular misconception that asbestos-containing materials were banned and removed from school buildings many years ago. Although the removal of asbestos from school buildings has been an option for schools, it is much more likely that schools, or local education agencies, have chosen to manage some asbestos-containing building material in place.

More asbestos answers inside.

Enforcement Alert



materials. The inspection portion stipulates that the Puerto Rico DOE will inspect all of its schools by Aug. 31, 2004, and inspect first the schools that were built prior to 1989, which are the most likely to contain asbestos.

As for abatement, the Puerto Rico DOE will fix any asbestos problems or isolate areas until they can be properly addressed. It also must submit monthly progress reports to EPA, inform the public of all

Asbestos in schools remains an important national public health issue, one that EPA takes most seriously

abatement work and clearly mark the areas to be abated or isolated. The Puerto Rico DOE must develop and update asbestos management plans; conduct all other inspections, such as those required on a semiannual and triennial basis; develop operations and maintenance plans; and keep records of all asbestos-related activities in all schools. All information pertaining to the requirements must be available for public review in each school.

This edition of EPA's Enforcement Alert is to remind schools of their obligations under AHERA and

Questions and Answers

provide the public with some very basic compliance information.

Why is asbestos a problem?

The presence of asbestos in highactivity public buildings, such as schools, makes accidental damage or disturbance of the materials possible and creates the potential for exposure. When asbestoscontaining building material is damaged or disturbed, fibers can be released into the air and they can be inhaled into the lungs by school children, teachers and school employees. Asbestos exposure can lead to diseases such as lung cancer, asbestosis (scarring of the lung) and mesothelioma (cancer of the abdominal lining). These diseases have a very long latency period. Symptoms of disease may not occur for 30 years after the initial exposure.

Is asbestos still used in building materials?

A number of building materials still in use today contain asbestos.
Asbestos remains in use as an acoustic insulator, thermal insulation, fire proofing, roofing, flooring and other materials. You can find a more complete list of where you can find asbestos at: www.epa.gov/asbestos/asbuses.pdf

What is AHERA?

The Asbestos Hazard Emergency Response Act, a provision of the Toxic Substances Control Act, was passed by Congress in 1986. AHERA requires local educational agencies to inspect their schools for asbestos-containing building material and prepare management plans that make recommendations for the reduction of asbestos hazards.

Who is subject to AHERA?

Public school districts and nonprofit private schools (collectively called local educational agencies) are subject to AHERA's requirements. This includes charter schools and schools affiliated with religious institutions.

How do I comply with AHERA?

The rules implementing AHERA are published in the Code of Federal Regulations, Chapter 40, Part 763, Subpart E. The AHERA rules require local education agencies to take actions, including the following:

- Perform an original inspection and re-inspection every three years of asbestos-containing material;
- Develop, maintain, and update an asbestos management plan and keep a copy at the school;
- Provide yearly notification to parent, teacher, and employee organizations regarding the availability of the school's asbestos management plan and any asbestos abatement actions





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assessed against local educational agencies first be used to return the schools to compliance with asbestos requirements.

What else do I have to do to ensure that students are safe?

The Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP), found at 40 C.F.R. Part 61, Subpart M, requires that owners or operators of facilities notify the appropriate authority (usually the state air agency) before demolishing or renovating facilities. If minimum amounts of regulated asbestos will be removed or disturbed, the owner/operator must adequately wet and carefully remove the asbestos components, keeping them wet until collected for disposal, and then disposing of the asbestos waste in accordance with the regulations.

There are certain emergency exceptions to allow speedy cleanup of unsafe buildings and other extraordinary conditions. The Asbestos NESHAP defines the kinds of facilities and asbestos that are regulated. Additional information at: www.epa.gov/compliance/resources/policies/civil/caa/neshapguid.html

Where can Hearn more?

Additional information on AHERA and asbestos in schools is available on EPA's asbestos in schools website at: www.epa.gov/asbestos/asbestos_in_schools.html

You will find several resources on the EPA website including the recently updated *The ABC's of Asbestos in Schools*. You can also request more information on the AHERA requirements from the Toxic Substances Control Act (TSCA) Assistance Information Service at 202-554-1404, or from the Asbestos Ombudsman at 1-800-368-5888.

EPA maintains 10 Regional Offices to implement Federal environmental programs around the country. These Regional Offices cooperate with Federal, State, interstate, and local agencies, as well as with industry, academic institutions, and other private groups, to ensure that their Region's needs are addressed and that Federal environmental laws are upheld.

Within each Region, Regional Asbestos Coordinators and National Emission Standards for Hazardous Air Pollutants (NESHAPs) Asbestos Coordinators oversee Asbestos efforts: www.epa.gov/asbestos/ regioncontact.html

Useful Compliance Assistance Resources

Office of Enforcement and Compliance Assurance: www.epa.gov/compliance

National Compliance Assistance Clearinghouse: www.epa.gov/ clearinghouse

Compliance Assistance Centers:

www.assistancecenters.net

Small Business Gateway: www.epa.gov/smallbusiness

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taken or planned in the school;

- Designate a contact person to ensure the responsibilities of the local education agency are properly implemented;
- Perform periodic surveillance of known or suspected asbestoscontaining building material;
- Ensure that properly-accredited professionals perform inspections and response actions and prepare management plans; and
- Provide custodial staff with asbestos-awareness training.

What is an asbestos management plan?

An asbestos management plan is the local educational agency's documentation of its recommended actions in response to asbestos. It cites the location of asbestos within the school and any action taken to repair or remove the material. The local educational agency must maintain records to be included in the asbestos management plan. These records include:

- A list of the name and address of each school building and whether the building has asbestos-containing building material and what type of material contains asbestos;
- The date of the original school inspection;

- The plan for re-inspections;
- A blueprint, diagram or written description that clearly identifies the location of any asbestoscontaining building material remaining in the school;
- A description of any response action or preventive measures taken to reduce asbestos exposure;
- A copy of the analysis of any building material and the name and address of any laboratory that sampled the material;
- The name, address, and telephone number of the person designated by the local education agency to carry out the plan; and
- A description of steps taken to inform workers, teachers, and students or their legal guardians about inspections, re-inspections, response actions and periodic surveillance.

The asbestos management plan must be updated with information collected during surveillance every six months, re-inspections every three years, and every time a response action is taken within the school.

Records of annual notifications to parents, teachers and staff concerning the availability of the school's asbestos management plan must be included within the asbestos management plan files.

Who is responsible for overseeing the management of asbestos in a school building?

The local education agency must nominate a "designated person" to perform and delegate, if necessary, the management of asbestos in a school building.

What is EPA doing to help keep children safe?

EPA is committed to ensuring that local educational agencies protect children by complying with AHERA. EPA will provide local education agencies and parents and teachers with information about the AHERA asbestos-in-schools requirements. EPA is working with the National Parent-Teacher Association, the National Education Association, and the Department of Education. A new website provides Regional contacts and news:

www.epa.gov/asbestos/ regioncontact.html

Although EPA is using outreach as its primary compliance tool, where appropriate, EPA will continue to take enforcement actions against local educational agencies that fail to maintain compliance with AHERA.

What happens to penalties assessed against schools for failure to comply?

AHERA provides that penalties

