

HOW TO EFFECTIVELY MANAGE HAZARDOUS MATERIALS INFORMATION AND MAINTAIN COMPLIANCE FOR SCHOOLS

Managing the risks and hazards of asbestos, lead based paint, poor indoor air quality, and chemical inventories in schools is extremely important for several reasons:

1. Exposure to lead-based paint is especially hazardous to children under the age of 6, causing learning disabilities and other health problems. Lead-paint is present in most schools constructed prior to 1978.
2. Children do not have highly developed immune systems so molds and fungus greatly affect them. Because of poor facility maintenance or building construction, molds and moisture problems that lead to sick building syndrome can be found in many schools.
3. Airborne asbestos fibers are extremely hazardous to students, teachers, maintenance staff and construction personnel. Under AHERA and OSHA requirements, schools have extensive asbestos management and record keeping requirements.
4. Schools use chemicals in high school chemistry laboratories and maintenance facilities, which if not properly stored and handled can cause severe injury. In addition, OSHA and EPA regulations require hazardous material to be inventoried, hazards communicated to employees and safety information available on site.
5. Due to lack of available funds, schools often do not have dedicated health and safety personnel on staff. Many times, the facility manager is in charge of the school's hazardous materials management program. More often than not, these individuals lack the training, time and systems required to effectively manage hazardous materials.

The Costs of Ineffective Hazardous Materials Management

Various OSHA and EPA asbestos, lead-based paint and hazardous materials regulations clearly require school districts to track the locations of hazardous materials in their buildings and provide proper notifications, warnings and access to safety information. These regulations were enacted protect students, teachers, maintenance and construction workers from exposure to hazardous materials. If lack of an adequate material inventory and notification system results in the inadvertent disturbance of a hazardous material, there are several serious consequences for the District.

First, OSHA and the EPA can cite the District for:

- Failure to notify
- Failure to post warning signs
- Failure to contain the work area
- Failure to provide training to workers
- Failure to provide personal protective equipment and respiratory protection

- Failure to perform worker exposure monitoring
- Causing a spill and unauthorized release to the environment

As a result, fines for an inadvertent disturbance can be in the tens or even hundreds of thousands of dollars.

Second, OSHA and the EPA can require the decontamination of large areas of the school, resulting in a public relations nightmare, expensive cleanup costs and loss of use of the affected areas.

Finally, occupants and workers in the vicinity of the disturbance can sue for exposures to the hazardous materials. The courts are full of cases where construction workers, maintenance personnel, and students were exposed to asbestos, lead-based paint and mold in buildings. The damages for exposures to these materials can be in the millions of dollars. In addition, there are the costs of attorney's fees. And due to hazardous material exclusions in property liability policies, the District may have to pay all attorneys fees, citations, and decontamination costs.

The ADAM Solution

The ADAM System was designed to provide school districts with a powerful, yet easy-to-use system for maintaining environmental records, information and compliance for their buildings. ADAM is currently used by 88 large organizations including; Boston, Spokane, Fort Bend, Oakland, and Long Beach Unified School Districts.

For each of your buildings, the ADAM System can store and provide easy access to:

- ✓ Location, quantity, condition and asbestos content of various construction materials.
- ✓ Location, quantity and test results for lead-based paint.
- ✓ Hazardous material and chemical inventory quantity, location, and safety information.
- ✓ Indoor air quality testing results, records of complaints and corrective actions taken.
- ✓ Records of all removal and abatement activities

ADAM FOR ASBESTOS COMPLIANCE

Survey and Testing Record Keeping Requirements

The EPA required all K-12 schools Districts to survey their buildings for asbestos in 1989 and maintain records of survey data which they are required to update every 6 months following material reinspections. Every three years asbestos management plans must be updated. In addition, OSHA requires schools owners to survey their buildings for asbestos prior to routine maintenance, construction or demolition activities. All records of samples taken must be maintained indefinitely.

OSHA and AHERA Notification Requirements

OSHA and AHERA requires schools to provide notifications regarding the locations of asbestos in their buildings. OSHA notifications are required to be provided to school employees and outside contractors. The notification must include the materials asbestos content, location and quantity. The notification is required to be provided to contractors bidding on work, again before the start of work, and to maintenance personnel who may come into contact with asbestos.

AHERA requires notifications be provided on an annual basis to teachers, school employees and the PTA regarding the locations of asbestos in each school and the availability of asbestos management plans.

The ADAM Notification Module enables schools to create standard notification text and prepares a building specific notification table listing the locations, asbestos content and quantity of asbestos in each school building to meet both AHERA and OSHA requirements. A record is stored for each notification recipient to meet record keeping requirements and make follow-up notifications easy to generate. Annual notifications can be generated as a batch from the recipients database.

Warning Sign Requirements

OSHA and AHERA require schools to label installed materials and post OSHA compliant asbestos warning signs in routine maintenance areas of each school building. The signs must include a list of materials in the building that contain asbestos. The ADAM System prepares building specific signs in compliance with OSHA requirements.

AHERA Management Plan and Record Keeping

ADAM helps schools meet all of their AHERA requirements by storing all survey and abatement records. The system also makes it easy to generate updated management plans every 3 years to meet AHERA requirements. Management plans and updated reports can be generated automatically with the click of a mouse.

Web Access

The ADAM Web Companion makes records available over the District's Intranet enabling them to provide system-wide access to the information electronically. This approach saves schools time and effort because the EPA will allow the electronically available survey and abatement information in ADAM to be used in place of paper-based records having to be maintained at each school site.

ADAM FOR LEAD-BASED PAINT COMPLIANCE

OSHA lead-based paint regulations require school districts to protect their workers from exposure to lead-based paint and provide them with personnel protection, exposure monitoring and training in safe work practices. Results of lead-based paint testing should also be provided to outside contractors so they can comply with OSHA regulations when lead is present and take precautions to protect their workers and the surrounding environment.

For this reason schools should provide outside contractors and their own employees with test results for lead on construction projects or maintenance projects that disturb painted surfaces.

For lead-based paint management, the ADAM System stores the locations, quantities and test results for lead-based paint and generates reports and notifications to meet OSHA requirements.

ADAM FOR INDOOR AIR QUALITY MANAGEMENT

Currently, there are no regulations specifically for indoor air quality and mold. However, building owners are required under the law to provide a healthy environment for their building occupants. For this reason, it is important for school districts to ensure that the air inside the building is safe

and that building occupants are not exposed to hazardous materials such as VOC's, mold spores, particulates, pesticides and other chemicals that can cause adverse health effects.

To assist schools in reducing liabilities and creating healthy indoor environments, the ADAM Indoor Air Quality Module stores and provides easy access to:

- Hazardous material and chemical inventory quantity, location, and safety information;
- Indoor air quality testing results, records of complaints and corrective actions taken; and
- Basic indoor air quality readings, sample results and ventilation readings to identify problems and help ensure the quality of the indoor environment.

And because proper building maintenance is a critical aspect to preventing indoor air quality problems, the system tracks and provides reminders for ongoing building maintenance activities and hazardous materials inspections to ensure buildings, mechanical systems and hazardous materials are inspected and maintained on an ongoing basis.

To learn more about the ADAM System visit the EcoLogic Systems web site at www.ecologicsystems.com or call 1-800-223-0609 to schedule an on-line demonstration.