

MESSIAH COLLEGE
Asbestos Operations and Management Program
Policy and Procedure

Policy It is the policy of Messiah College to facilitate the management of asbestos-containing materials (ACM) in a manner consistent with the Occupational Safety and Health Administration (OSHA) Standard 29CFR1910.1001 regarding work practices, and the Environmental Protection Agency (EPA) rules (40CFR763.114) governing exposure to and the handling and disposal of asbestos, in order to ensure the safety of employees, visitors, and residents.

Objectives

1. To control and properly handle and dispose of ACM.
2. To provide appropriate communication to employees, visitors, and residents regarding asbestos related issues.
3. To continue this program until all ACM is removed from the campus.

DEFINITIONS

Asbestos – The general name for a group of asbestiform minerals (fibrous mineral forms) including chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite.

Asbestos Containing Materials (ACM) – Any material composed of asbestos of any type and in an amount greater than one percent (1%). OSHA considers regulated asbestos as any detectable limit.

Friable – Material that, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously non-friable material after such previously non-friable material becomes damaged to the extent that when dry it may be crumbled, pulverized or reduced to powder by hand pressure.

Non-friable – Material which when dry may not be crumbled, pulverized or reduced to powder by hand pressure.

BACKGROUND

Facility Maintenance A campus-wide assessment designed to identify the location and condition of ACM was conducted by Environmental Hazard Consultants (EHC) in 2006. This assessment was updated by EHC in 2011. The initial facility assessment included an onsite

physical inspection of all facilities owned by Messiah College at that time (2006). It included locating materials suspect ACM. A complete copy of this report is located in the Lenhert Resource Room. The assessment will be updated periodically.

Some sampling of suspect ACM was gathered and compiled in sufficient detail to differentiate between materials containing asbestos as opposed to those which did not (i.e., containing less than 1% asbestos). The intent of the facility assessment was to provide information that will facilitate an effective operations and maintenance program. In addition to this documentation, Comprehensive Safety Compliance provided narrative detailing the physical condition of the materials identified for each facility.

As a continuation of the initial campus-wide ACM survey, whenever Messiah College purchases an existing structure, or as a result of operations exposing heretofore unknown possible ACM in buildings previously surveyed, the acquired structure or the exposed material is surveyed. Any suspect ACM that may be found is documented as to type of material, condition (i.e., friability), and location.

Suspect and known ACM is treated the same way in regard to the operations and maintenance functions. When abatement is considered, suspect ACM is treated as known ACM or tested and treated in a manner consistent with the results of such tests.

Operations and Maintenance of Asbestos

Improper removal can create a dangerous situation where none previously existed. In this regard, the operations and maintenance program is designed to reduce exposure to ACM by performing abatement activities by employing only licensed and Pennsylvania Department of Environmental Protection (PaDEP) certified Asbestos Removal Contractors. In addition, the operations and maintenance program will help to ensure that exposure to asbestos-containing materials is below the regulatory safety guidelines established by OSHA.

Work Practices

The fact that employees will not be directly involved in abatement activities significantly reduces the need for special work practices. Further, the operations and maintenance program will help to ensure that the work environment does not present the risk of exposure to asbestos-containing materials at a level that exceeds OSHA guidelines.

To complement these efforts, specific work practices will be developed to control the disturbance or damage of asbestos-

containing materials and to minimize ACM on campus. These practices include, but are not limited to:

- Garage Area - Only non-asbestos materials will be used in our fleet maintenance area. Example, asbestos-free brake pads and linings, clutches, etc.
- Campus Events - Special precautions will be taken in the care of asbestos containing flooring. Sanding will be prohibited. Stripping of finishes shall be conducted using low abrasion pads at speeds lower than 300 rpm and wet methods will be utilized. Dry buffing is not permitted unless there is sufficient finish so that the pad cannot contact the ACM.
- Heat treat ovens, furnaces, kilns which may have ACM for insulation shall not be repaired by employees unless an asbestos determination has been made. If exposure of friable insulation/dust is evident, the unit shall be taken out of operation and tested for asbestos.
- A list of ACM on campus is found in Attachment C.
- ACM not banned for manufacture, importation and distribution in commerce are listed below; therefore, all new construction will be specified to contain asbestos-free materials.
 - Cement corrugated sheet
 - Cement flat sheet
 - Clothing
 - Pipeline wrap
 - Roofing felt
 - Vinyl floor tile
 - Cement shingle
 - Millboard
 - Cement pipe
 - Automatic transmission components
 - Clutch facings
 - Friction materials
 - Disk brake pads
 - Drum brake linings
 - Brake blocks
 - Gaskets
 - Non-roofing coatings
 - Roof coatings

The Facility Maintenance Service Manager is a licensed asbestos abatement employee of the College. As part of his licensing, he completes annual training and certification in asbestos abatement and is also trained, fit tested and approved for the use of an air-purifying respirator. However, any large abatement projects are contracted to outside, licensed vendors.

Emergency Response Emergency actions will be implemented when exposure levels exceed the action level prescribed by OSHA. Where such exposure is suspected, access to the area will be restricted until air monitoring can be conducted by an independent environmental testing lab in order to determine the actual hazard level. Depending upon location, the immediate shut-down of air handling systems might be required to assist with controlling any release. Immediate abatement will be considered where measures to control release and limit exposure restrict business activities or where such measures do not ensure the continued safety of employees, visitors, and residents.

Call Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper is not available or no answer, refer to appropriate telephone number listed on the inside back cover
(e.g., CHEMTREC 800-424-9300, DEFENSE LOGISTIC AGENCY 800-851-8061). National Response Center (1-800-424-8802), PA Emergency Management Agency (1-800-424-7362) and 3E Company (1-800-451-8346).

Abatement Abatement activities will be considered when there is reason to suspect that asbestos-containing materials will be, or have been, damaged or disturbed in such a way as to create potential exposures greater than the OSHA prescribed limits. Further, abatement will be considered wherever significant renovation or construction work is planned.

Abatement work will be conducted only by outside firms licensed and PaDEP certified to perform asbestos abatement or the Facility Maintenance Service Manager who is a licensed abatement service provider. Depending on the purpose and scope of abatement work to be conducted, outside abatement contractors will be chosen by Messiah College and may be managed by a general contractor in conjunction with an independent environmental testing lab, also of Messiah College's choice.

The Project Manager will oversee work required in order to prepare utilities (electricity and water) for maintenance and abatement procedures.

The Campus Events Manager will oversee the removal of any furniture or other objects that may be in the way of planned work or may become contaminated by the abatement process.

Regardless of who oversees the abatement work, the following steps shall be followed:

1. A qualified abatement contractor will be selected in accordance with Messiah College's policy and the following guidelines:
 - a. Check references.
 - b. Conduct interviews.
 - c. Review insurance coverage.
 - d. Have the contractor write precise specifications, and then review them with the contractor.
 - e. Select the "best" contractor, not necessarily the lowest bidder.

2. The abatement contract Project Manager will inspect the work site frequently throughout the day to ensure compliance with all prescribed work practices and worker protection measures, including:
 - a. Construction of a totally effective containment barrier around the entire work area, or the use of containment bags for wrapped insulation.
 - b. Making sure that proper worker change and decontamination facilities are provided.
 - c. Seeing to it that all job specifications are being followed -- variations from them must be discussed with/approved in advance by the Messiah College representative overseeing the project or by higher level administrative personnel depending on any possible effect the changes may have on college operations/personnel.
 - d. Obtaining background air samples both inside and outside of containment by an independent environmental testing lab.
 - e. Obtaining personal air monitoring samples from workers in containment, either by the abatement contractor as part of the contract terms, or by an independent environmental testing lab.
 - f. Posting of asbestos hazard warning signs in appropriate locations during abatement.
 - g. Posting on site of all required permits and certifications as required by state and federal regulations.
 - h. Proper use of personal protective equipment (PPE), specifically respirators and Tyvek coveralls, by all workers inside containment.
 - i. Maintaining negative air pressure for the duration of operations until air clearances are obtained.
 - j. Properly bagging and labeling abated material with originator's (Messiah College's) address.

3. Abatement work will be stopped immediately if any condition of the worksite appears to be hazardous.

4. The contractor should be released only after:
 - a. The work site has been thoroughly cleaned at least twice.
 - b. A visual inspection reveals the work specified was done and the site passes a visual test for abatement completion and cleanliness.
 - c. Air testing conducted has determined that the quantity of airborne fibers present in the air is within prescribed safe levels.

5. The Project Manager will see that:
 - a. Disposal records received from the abatement contractor are reviewed to assure the ACM was disposed of properly ("cradle-to-grave" documentation will be included).
 - b. Complete records of all abatement activities are sent to his/her office to ensure that facility assessment information is updated. All records are to be kept on file forever, per PaDEP instructions.
 - c. All related project documents are filed in the asbestos master file in the Facility Services Resource Room in the Lenhert building.

RESPONSIBILITY

Vice President for
Operations

The Vice President for Operations is responsible for:

1. Seeing to it that an assessment of the facility to identify the location and potential hazards of ACM has been completed and is on file in the Lenhert Resource Room.

2. For developing and consistently enforcing an operations and maintenance program designed to minimize the exposure of building occupants to asbestos materials by monitoring the condition of ACM and taking action as necessary.

3. Providing for effective and safe abatement of ACM where necessary.

Compliance
Coordinator

The Compliance Coordinator is responsible for:

1. Seeing to it that staff working in areas containing ACM shall receive awareness level training. Such training will prepare these individuals for their responsibilities in the Asbestos O & M Program. Awareness level training will involve training on a variety of topics, including the following:
 - a. Asbestos health hazards.
 - b. Identifying asbestos-containing materials.

- c. Safety guidelines for exposure.
 - d. Recognition of asbestos exposure risks.
 - e. Asbestos related regulatory requirements.
 - f. Work protection methods.
 - g. Emergency response procedures.
2. Ensuring that staff members receive appropriate levels of training consistent with their roles in the Asbestos O & M Program.
 3. Training records from Qualtrics training programs will be the responsibility of the Compliance Coordinator.

Project Manager

1. Contact an independent environmental testing lab to have any suspect ACM tested for any possible asbestos properties.
2. Maintain complete records of all abatement activities -- these are to be sent to the Facility Service office to ensure that facility assessment information is kept up-to-date. All records and related project documents are to be kept on file forever, per PaDEP instructions, in the asbestos master file in the Lenhart Resource Room with the exception of the following:
 - a. Personal air sampling records will be maintained for at least thirty (30) years if they involve Messiah College employees. They will be kept with other records of the asbestos project.
 - b. Data used to qualify for exemptions from initial monitoring requirements of the OSHA will be maintained for the duration of the exemption and will be kept with the project documents.

Manager of
Facility Maintenance,
Project Manager,
and Campus Events

The Facility Maintenance Service Manager, Project Manager, and Campus Events are responsible for:

1. Reviewing work assignments to determine if such assignments are likely to damage or disturb ACM. Managers are responsible for ensuring that workers under their direction are not exposed to asbestos at or above the permissible exposure levels established by OSHA. In order to minimize the risk of staff member exposure due to the likelihood of damage or disturbance, the Project Manager will contact a qualified abatement contractor and a certified, independent environmental testing lab to arrange for the

proper removal of the ACM before such work assignments are permitted to begin. The Managers, in conjunction with the Project Manager, will also hold outside contractors/vendors to the same safety standards by reviewing the scope of their work before construction or demolition may begin.

2. Information gathered from this Asbestos Operations and Maintenance Program (Asbestos O & M Program) -- it will be used to update the facility assessment to ensure current, accurate information on the location and condition of asbestos-containing materials. This information will be maintained in the Lenhart Resource Room.
3. Providing training for all of their staff members in order to facilitate the implementation of this program with the goal of significantly reducing the likelihood of the unnecessary disturbance of ACM. The Facility Service Manager is to consider if work is likely or unlikely to cause disturbance of ACM -- all work likely to cause such a disturbance must be preceded by appropriate abatement activities. If a material is suspected to be ACM, that material must be sampled and tested for asbestos content (if any), and then be required to be removed as part of a construction or maintenance repair project. Staff members' training records (which are not a part of Qualtrics training) will be maintained for one year beyond the last date of each worker's employment by area leadership.

Project Manager

The Project Manager is responsible for:

1. Continuing the initial campus-wide asbestos assessment. Whenever Messiah College purchases an existing structure, or as a result of operations exposing heretofore unknown possible ACM in buildings previously surveyed, the acquired structure or the exposed material is initially surveyed by the Facility Maintenance Service Manager, and then if necessary, by an independent environmental testing lab. Any suspect or actual ACM that may be found is documented as to its form, condition, and the type of ACM and its location.
2. Arranging for abatement and removal of any ACM in areas where it may become disturbed or damaged, and thereby

presents a significant risk of exposure at or above the safety exposure guidelines.

3. Arranging for an independent environmental testing lab for purposes of positive identification of ACM through bulk sampling and air samples, and documentation of such. The Project Manager will also arrange for such a lab to serve as the college's representative and environmental hygienist to monitor safety operations of any asbestos abatement project, as well as perform all necessary air monitoring and other regulated activities related to such a project.
4. Air monitoring represents an important part of an overall surveillance program. Air monitoring will be conducted wherever it is reasonable to assume that staff members might receive significant exposure to asbestos fibers. Such air monitoring will be used to ensure that staff exposure is below regulatory safety guidelines. If results would indicate that exposure levels are at or above those safety guidelines, immediate actions will be taken to eliminate the risk of such exposure.

Vice President for
Human Resources
and Compliance

The Vice President for Human Resources and Compliance is responsible for maintaining certain records according to regulatory requirements. These records are indicated below:

1. Medical records for staff members subject to the medical surveillance program will be maintained for thirty years beyond the last date of each workers employment. All medical records must be kept in HR due to HIPPA implications.

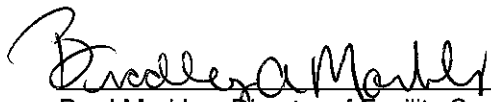
"Note - The signed copy of this procedure is filed in the Facility Service Department. By signing this policy you have agreed to enforce the contents, share with your staff and adhere to standards".

■ Approved Reviewed Revised




Kathrynne G. Shafer, Vice President for Operations

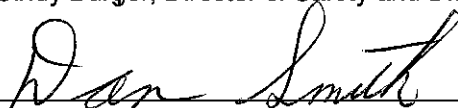
Amanda Coffey, Vice President for Human Resources and Compliance



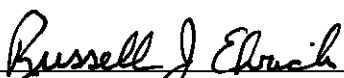
Brad Markley, Director of Facility Services



Cindy Burger, Director of Safety and Dispatch Services



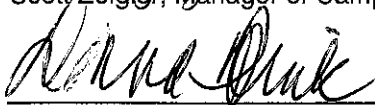
Dan Smith, Facility Maintenance Service Manager



Russ Ehrich, Project Manager



Scott Zeigler, Manager of Campus Events



Donna Fink, Compliance Coordinator

Appendix A

All individuals involved in building inspections, developing management plans, designing projects, and/or individuals that may come into contact with Asbestos shall attend an initial training within thirty days of hire and shall participate in an annual ACM training program.

List of Individuals that Require annual training		
Work Center	Name/Title	Type of Training
Operations	V.P. of Operations	ACM Training
Human Resources	Vice President for Human Resources and Compliance; Compliance Coordinator	ACM Training
Facility Maintenance	All Employees	ACM Training
Facility Maintenance	Certified Asbestos Abatement Employee	Certified Abatement Training; Respirator Training & Fit Testing
Campus Events	All Employees	ACM Training
Department of Safety	All Employees for emergency awareness	ACM Training
Grounds Department	Grounds Mechanic; Grounds Manager	ACM Training
IT Department	Director of Network Services; Communication Technicians; Communications Infrastructure Analyst	ACM Training