

Weber State University

Asbestos and Lead Management Program



WEBER STATE UNIVERSITY
Environmental Health & Safety

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INTRODUCTION

Asbestos is a health hazard to humans when it becomes airborne during cutting, sawing, sanding, drilling, and demolition of materials that contain asbestos. Asbestos has been identified in several Weber State University (WSU) buildings during the asbestos survey and inspection process. Lead is a health hazard to humans when inhaled, absorbed, or swallowed from dust, paint chips, gasoline, or other items that contain lead. Although lead has been banned, it can be found in painted items or gasoline used in off-road vehicles. Weber State University is committed to the health and safety of the entire campus community including staff, students, and visitors. The Asbestos and Lead Management Program is designed to protect the campus community from potential asbestos and lead hazards and to ensure that asbestos-containing materials (ACMs) or lead-containing materials (LCMs) are maintained, removed, and handled in compliance with state and local regulations.

Asbestos was used in numerous building materials until about 1978. These building materials have a limited life span, and they deteriorate due to age, gravity, moisture, and impact. Weber State University will maintain ACMs until they are removed prior to renovation and demolition projects. Asbestos-containing materials that become damaged or deteriorated will be either repaired or removed. All ACMs must eventually be contained or removed from a building before the building is demolished.

Lead is a pervasive element in our environment, existing in the air, soil, water, and even within our homes. The primary source of exposure to lead is through human activities such as the use of fossil fuels, past utilization of leaded gasoline, certain industrial operations like mining and manufacturing, as well as the use of lead-based paint or plumbing in older buildings constructed before 1978. Lead-based paint, in particular, poses a significant risk if not properly maintained, as it can deteriorate and release hazardous particles that can be inhaled or ingested by individuals, including children, residents, and workers. Additionally, lead dust can be dispersed during renovation, repair, or remodeling activities, further contributing to the potential for exposure.

SCOPE

This program applies to all Weber State University-owned, rented, or leased buildings, its employees, and the public. The asbestos and lead abatement projects conducted by contractors at WSU will be coordinated and managed under this program and all contractors will be required to comply with all applicable regulations. There are practices that faculty, staff, and contractors can take to minimize the potential exposure to asbestos and lead. This program covers the aspects of training, asbestos and lead inspections, maintenance, labeling, repair, emergency response, cleaning methods, and removal of asbestos-containing and lead-containing materials in WSU buildings.

DEFINITIONS

- **Abatement** Work that involves the physical removal of asbestos. Work must be performed by trained personnel under the supervision of a competent person as defined by the Environmental Protection Agency (EPA).
- **Aggressive Method** Removal or disturbance of building materials by sanding, abrading, grinding, or other methods that break, crumble, or disintegrate intact ACM.
- **Asbestos** A natural material made up of tiny fibers including chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.

- **Asbestos-Containing Material (ACM)** Any material containing more than one percent asbestos, or is assumed to be in the absence of testing (Presumed Asbestos-Containing Material - PACM).
- **Class I Asbestos Work** Activities involving the removal of thermal system insulation (TSI) and surfacing ACM and PACM.
- **Class II Asbestos Work** Activities involving the removal of ACM which is not TSI 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.
- **Class III Asbestos Work** Repair and maintenance operations, where ACM, including TSI and surfacing ACM and PACM, is likely to be disturbed.
- **Class IV Asbestos Work** Maintenance and custodial activities during which employees contact but do not disturb ACM or PACM and activities to clean up dust, waste and debris resulting from Class I, II, and III activities.
- **Control Measure** A measure used to control the generation of airborne asbestos fibers or leaded dust until a permanent solution can be implemented. These measures can include encapsulation, repair, encasement, and enclosure.
- **Decontamination Area** An enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, materials, and equipment that are contaminated with asbestos.
- **Delamination** Physical separation of one layer from another.
- **Demolition** The wrecking or taking out of any load-supporting structural member and any related razing, removing, or stripping of asbestos products.
- **Disturbance** Activities that disrupt the matrix of ACM or PACM, crumbles or pulverizes ACM or PACM, or generates visible debris from ACM or PACM.
- **Employee Exposure** Exposure to airborne asbestos or lead that would occur if the employee were not using respiratory protective equipment.
- **Encapsulation** The application of a sealant over the surface of the material to prevent the release of asbestos fibers or lead-based paint (LBP).
- **Enclosure** An airtight, impermeable, barrier around ACMs designed to prevent the release of asbestos fibers into the air.
- **Friable** Material which when dry is capable of being crumbled, pulverized, or reduced to powder by hand pressure and therefore likely to emit fibers.
- **Glovebag** An impervious plastic bag-like enclosure not more than a 60 x 60-inch area that affixes around an ACM, with glove-like appendages through which material and tools may be handled.
- **High-Efficiency Particulate Air (HEPA) Filter** A filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter.
- **Intact** Asbestos-containing material that has not crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bound with its matrix.
- **Lead** A naturally occurring bluish-gray metal that does not biodegrade or disappear from the environment over time.
- **Lead-Containing Materials (LCM)** Any material containing lead, primarily plumbing materials and lead-based paint (LBP).
- **Negative Exposure Assessment (NEA)** A demonstration by the employer that the employee exposure during an operation is expected to be consistently below the Permissible Exposure Limits (PELs).

- **Permissible Exposure Limit (PEL)** The highest allowable level of exposure to airborne asbestos at 0.1 fibers per cubic centimeter of air averaged over eight hours i.e. Time Weighted Average (TWA).
- **Personal Protective Equipment (PPE)** Any material or device worn to protect a worker from exposure to, or contact with, any harmful material or force.
- **Presumed Asbestos Containing Material (PACM)** Thermal System Insulation and surfacing material found in buildings constructed no later than 1980. All materials meeting this definition **must** be presumed to be asbestos-containing and handled as such unless analytical testing proves otherwise.
- **Regulated Area** An area established by the employer to demarcate areas where airborne concentrations of asbestos or lead exceed, or there is a reasonable possibility, they may exceed the PEL.
- **Removal** Operations where ACM/PACM or LCM is taken out or stripped from structures or substrates, including demolition operations.
- **Renovation** Modification of any existing structure, or portion thereof.
- **Respiratory Protection** A device worn that either purifies the air or provides clean air from another source to the wearer.
- **Surfacing Material** 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.).
- **Thermal System Insulation (TSI)** Material applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain.
- **Time-Weighted Average (TWA)** Refers to the average air concentration of contaminants during a particular sampling period (typically 8 hours).

ROLES AND RESPONSIBILITIES

Campus Departments

- Responsible for contacting the Asbestos Program Committee (APC) during the planning process to evaluate projects that will impact building materials so that APC can review records and collect samples as needed to characterize the materials to be impacted
- Responsible for the expenses associated with asbestos and lead inspections, removal, and associated air monitoring

Contractors

- Follow all provisions of the applicable regulations governing asbestos and lead operations and project-specific asbestos or lead abatement specifications
- Shall only use individuals accredited as Asbestos Workers or Asbestos Contractors/Supervisors by the Utah Division of Air Quality (DAQ) to perform asbestos abatement
- Asbestos hazards shall be abated by the contractor who created or controls the source of contamination
- Shall only use individuals currently certified as an LBP individual working for a Utah-certified LBP firm

Employees

- Report damaged ACM and PACM to their supervisors so they can be evaluated for asbestos before they are removed or repaired

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- Report suspected damaged LCM to supervisors so it can be evaluated for lead
- Shall not damage or disturb any ACM/PACM or building materials that may contain asbestos unless they have been determined to be reasonably safe by the APC
- Must ensure ACM/PACM, or building materials that may contain asbestos, are intact while cleaning or during activities that place employees near ACM/PACM
- Attend initial and refresher training as directed by their supervisor, the Environmental Health and Safety (EHS) office, and the APC

Environmental Health and Safety (EHS)

Various departments across campus are affected by this program and maintain individual responsibility. Environmental Health and Safety is a campus-wide resource to assist other departments in maintaining compliance with this program. Other EHS responsibilities for this program include:

- Participate with the APC by assisting with the Asbestos and Lead Management Program development, direction, and implementation
- Verify compliance of the Asbestos and Lead Management Program with applicable laws, codes, and regulations
- Provide awareness-level training to appropriate personnel
- Provide other pertinent training relating to asbestos and lead which may include: Respiratory Protection, Confined Space Awareness, Personal Protective Equipment, and Hazard Communication
- Assists in coordinating with emergency response to all incidents on campus involving ACM or LCM

Asbestos Program Committee (APC)

The APC serves to provide resources to university employees and supervisors for the safe handling of ACM and LCM. The APC is responsible for reviewing asbestos and lead surveys. The APC will meet regularly to:

- Maintain a building survey list
- Assess the facilities, procedures, practices, and training/expertise of personnel involved in ACM
- Determine when additional building surveys are required
- Prioritize upcoming building surveys
- Serve as a review committee for small projects and determine the validity of the last survey

The APC is comprised of at least five members who collectively have experience and expertise in our facilities and/or asbestos. The committee members currently consist of the Asbestos Program Manager, Associate VP of Facilities Campus Planning, an EHS Representative, Director of Campus Planning and Construction, Director of Facilities Operations, Preventative Maintenance Superintendent, and Facility Asset Coordinator.

ASBESTOS & LEAD MANAGEMENT PROGRAM

Facilities Management (FM)

Facilities Management will designate an **Asbestos Program Manager (APM)**. The APM will be responsible for the Weber State University Asbestos and Lead Management Program. The APM will act as the chair for the APC. The APM responsibilities include:

- Asbestos Management Program development, direction, and implementation
- Conduct/coordinate periodic asbestos and lead building surveys and inspections
- Review all asbestos and lead abatement projects for compliance
- Provide guidance on asbestos and lead project management to ensure renovation, construction, or emergency maintenance activities are performed safely
- Maintain records and documentation pertaining to asbestos and lead compliance
- Maintain an active list of abatement priorities based on information gathered during the periodic reassessments of ACM

Human Resources (HR)

- Process all potential personnel exposure incidents
- Provide medical surveillance for all employees involved in asbestos and lead-related work, including chest X-rays
- Issue notification letters when exposures occur
- Maintain all personal health records regarding asbestos and lead work exposures

Project Managers

- Coordinates with the APC when renovations and demolitions are planned that may involve the disturbance of ACM/PACM, or LCM
- Ensure funding for all environmental considerations, including abatement and consultations are accounted for in project budgets
- Obtain bids and contracts with certified abatement firms to conduct asbestos and lead abatement work associated with renovation or demolition projects
- Prequalify all asbestos and lead abatement contractors
- Conduct oversight of projects involving asbestos and lead-related activities
- Provide the APC with a copy of all building surveys and project specifications information for abatement activities as they are obtained

Supervisors

- Verify employees are following all information and procedures contained within this Asbestos and Lead Management Program
- Ensure employees who are required to be trained receive the appropriate training
- Ensure employees follow safe work practices in accordance with their training
- Ensure the proper use of equipment and controls
- Ensure that employees don't disturb any ACM or LCM

PROCEDURES

Building Maintenance

Facilities Management is responsible for installing, operating, and maintaining plumbing systems, lighting and fixtures, glass replacement, signage, and painting. Such duties can result in employees entering and performing work in areas with known ACM or LCM. Weber State University employees shall not disturb any ACM or LCM as part of their duties unless they have been directed to do so and have received the appropriate training on the type of material(s) involved.

Building Services

Housekeeping, custodial, and moving activities happen on a daily basis. Employees clean all areas of campus, polish and wax floors, remove trash, and move equipment across campus. Employees may be involved in cleaning areas known to contain ACMs or LCMs, but are unlikely to come into direct contact with these materials. All efforts will be made to ensure the integrity of the ACMs or LCMs remains intact during these activities.

Demolition/Renovation

Before starting any construction or renovation activities the APC will ensure that a current survey of the building has been performed, regardless of the date of construction. If the area is indicated as not having any ACM or LCM, then work may proceed. If the building/area is found to have ACM or LCM in a recent survey then an abatement project needs to be implemented into the renovation plans.

Abatement projects will comply with the Utah DAQ regulations by using methods and engineering controls that include negative pressure enclosures, HEPA vacuuming, wet methods, air filtration, prompt debris cleanup and disposal, protective clothing, respiratory protection, regulated area signage, for all asbestos and lead repair and removal. The project manager will ensure that ACMs are maintained in undamaged containers until they can be properly removed. Abatement contractors on the Utah DAQ-certified list will conduct contracted abatement projects. Project managers will oversee the contract and abatement process, and will provide the APC with all documentation.

Emergency Response Procedures

There is a chance that ACMs may be disturbed, potentially releasing asbestos fibers. Employees are to adhere to the following protocol when reporting a potential fiber release in an area known to have ACMs:

1. Immediately evacuate and secure the area to prevent unauthorized or unintentional entry
2. Notify the immediate supervisor of the incident
3. If anyone was in the area of fiber release, seek medical attention (fill out an Individual/Supervisor's Report of Incident)
4. Contact the APM Todd Lloyd at 801-940-1078. If Todd is unavailable, contact the FM After Hours Response at 801-430-8852.
5. The APM will ensure area(s) are properly secured, and facilitate a response by an external abatement contractor or assign a trained in-house team to make repairs and clean up any debris as quickly as possible.
6. The APM will advise the APC of the incident, response, and mitigation measures.

7. A post-incident review will be held to document the incident and the response.

Labeling

Signage identifying the presence and location of ACMs shall be posted at the entrance to mechanical rooms or areas that contain TSI and surface ACM. Specific work practices to ensure the material is not disturbed shall be adopted.

Medical Surveillance

Medical surveillance examinations shall be conducted on employees with significant asbestos exposure (> PEL for 30+ days per year). This medical surveillance consists of reviewing medical and work history, an annual physical exam directed to the pulmonary and gastrointestinal systems, chest x-rays, and pulmonary function tests.

Periodic Inspections

The APC will ensure periodic inspections occur to evaluate the condition of ACMs and LCMs and determine if repair, removal, or other maintenance is required.

Record Keeping

The APC will maintain required records including notifications, waste disposal manifests, and air clearance documentation. The EHS office will maintain training records. HR will maintain medical surveillance records.

Respiratory Protection

Abatement contractors are responsible for their respiratory program and issuance of PPE and respirators. When assigned to asbestos work, all WSU employees must be provided with proper protective clothing and respirators. The EHS office will ensure that all WSU employees who have been trained in asbestos handling adhere to the respiratory protection guidelines.

Waste Disposal

Contractors performing abatement projects will dispose of ACMs in a certified asbestos disposal facility and follow all federal, state, and local notification requirements. Weber State University employees trained to work with disturbed asbestos and lead-containing material shall ensure all asbestos and lead waste is removed, packaged, and labeled appropriately; stored in a secured area; and disposed of using licensed transporters and disposal facilities.

TRAINING

Asbestos Awareness Training - The Environmental Health and Safety office will provide asbestos awareness training annually to various departments and custodial staff who perform duties that contact but do not intentionally disturb ACMs. This training is provided to cover topics including the health effects of asbestos, recognition of damage, and proper response to asbestos damage.

Asbestos Contractor/Supervisor Certification - Required for staff conducting and supervising the removal of ACMs over 3 SF (square feet) or 3 LF (linear feet). The initial course is 5 days, and a one-day refresher is required annually.

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Asbestos Inspector Certification - Required for staff to conduct asbestos inspections in facilities, identify suspected ACM, and collect building material samples for asbestos analysis. The initial course is 3 days and a 4-hour annual refresher is required.