

1. Purpose

The purpose of the University of Denver Asbestos Policy is to establish the means to prevent personal asbestos exposures to DU and contractor workers by managing and controlling suspect asbestos containing materials (ACM) and by establishing abatement requirements for contractors.

2. Authority

The DU Asbestos Policy is written in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication regulation, 29 CFR 1910.1001, *Asbestos*, and the Colorado Department of Public Health & Environment (CDPHE) Regulation No. 8 Part B, Asbestos Control.

3. Scope

A comprehensive asbestos survey of all DU buildings has not been performed. Asbestos surveys, however, have been and are performed (1) in areas where suspected ACM has been accidentally disturbed or is in deteriorated or friable condition or (2) where construction activities are scheduled. The abatement of non-friable asbestos, such as non-friable asbestos, may be performed by qualified DU employees, trained in Asbestos Awareness, provided that the material remains non-friable during abatement.

4. Definitions

- **Asbestos Containing Material (ACM)** Material containing more than 1% asbestos.
- **Disturbance** Activities that disrupt the matrix of ACM or presumed ACM, crumble or pulverize ACM or presumed ACM, or generate visible debris from ACM or presumed ACM.
- **Friable -** Material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.

4. Responsibilities

Department supervisors

- verifying that confirmed or suspected asbestos materials, such as wallboard insulation, pipe insulation, ceiling tiles, and floor tiles, are not disturbed during renovation or housekeeping activities where a potential asbestos exposure may occur
- verifying its applicable employees have received two hour asbestos awareness training and knowing how to properly respond to potential asbestos hazards
- maintaining current training records of their personnel
- isolating areas in which suspect or confirmed friable ACM is damaged or spilled and notifying the EH&S Director.



Facilities Management

- obtaining the services of qualified asbestos inspectors to perform asbestos inspections, abatement contractors to perform asbestos abatement work, and air monitoring specialist to perform air sampling, as needed
- barricading areas where suspect or confirmed friable ACM that is disturbed or spilled
- maintaining records of asbestos inspections and abatement work on DU property
- maintaining records of confirmed ACM in buildings, including material description, location, and condition
- labeling identified building ACM
- provide representative to accompany the EH&S Director to survey buildings every six months in which ACBM exists
- maintaining documents of contractor abatement activities.

Project Managers

- obtaining the services of qualified asbestos inspectors to perform asbestos inspections, abatement contractors to perform asbestos abatement work, and air monitoring specialist to perform air sampling, as needed
- verifying that asbestos contracted work, including inspections and abatement work, is performed in accordance with the Colorado Department of Public Health and Environment (CDPHE) Regulation No. 8
- verifying that any asbestos contractor performing work on site has adequate training;
- notifying the EH&S Director of proposed construction activities in which a potential asbestos hazard exists
- providing the EH&S Director with contractor documents, including Statements of Work, asbestos monitoring reports, and any other relevant documents concerning construction activities in which asbestos is involved
- verifying DU employees are adequately notified of and protected from asbestos abatement activities.

Environmental Health & Safety Director

- maintaining annual state certification as an Asbestos Inspector/Project Manager
- providing bulk asbestos sampling, when available
- investigating potential asbestos exposure incidents
- reviewing documents for proposed asbestos activities, including inspection reports,
 Statements of Work, and air monitoring results, to ensure compliance with applicable government regulations
- performing as the Operations & Maintenance *Designated Person* a survey of the existing ACM every six months to assess the condition of existing ACM
- providing asbestos awareness training to DU employees.



5. Requirements

- Asbestos inspections and abatement activities must be performed in accordance with Regulation No. 8, including the use of only State certified inspectors, abatement contractors, and air monitoring personnel. The Project Manager or applicable DU foreman is responsible for ensuring the abatement contractor meets the State requirements. For abatement projects, the abatement contractor and the air monitoring specialist shall be obtained be separately by the university, not by a contractor. The air monitoring specialist must be independent of the general contractor or abatement contractor to avoid possible conflict of interest.
- The EH&S Director will act as a consultant for contracted asbestos work, by reviewing relevant documents and providing recommendations to ensure compliance with State and Federal regulations.
- An Operations and Maintenance (O&M) plan (see appendix 1) is in place to manage identified asbestos. The plan provides for notification of affected persons, surveillance of existing ACM, proper work practices, recordkeeping, and training. The EH&S Director, accompanied by a Facilities Management representative, will perform an annual hazard assessment of existing friable ACM, to include abatement recommendations.
- In the event of a spill episode or the accidental disturbance of confirmed or suspected ACM the area will be immediately isolated or otherwise protected from additional disturbance or personnel access. This may include evacuating personnel and/or isolating the building ventilation system. The EH&S Director should be notified immediately of any potential asbestos hazardous situation. The EH&S Director will provide recommended response actions to the Facilities Management Department and a written assessment of potential personal exposures that may have occurred.
- Suspect or confirmed asbestos materials that are friable and damaged will be immediately secured or barricaded so as to prevent disturbance. If the content of the material is unknown a bulk asbestos sample will be collected by a State certified asbestos inspector to determine if the material contains asbestos. If the material is confirmed to contain asbestos the EH&S Director will perform a hazard assessment to determine the proper abatement of the material.
- Employees should avoid disturbing suspect ACM. Work that involves contact with suspect ACM such as hammering nails or cutting into suspect material should be reviewed by the EH&S Director. The RECOMMENDED GUIDELINES FOR THE MAINTENANCE OF ASBESTOS CONTAINING FLOOR COVERING (see Appendix 2) should be followed by custodial staff to minimize the potential for airborne asbestos fibers.



6. Training requirements

- Two hour awareness training in accordance with Colorado Regulation No. 8 will be given to DU employees who may potentially disturb ACM during the course of their work.
 Employees are required to attend this training annually or whenever management determines it's necessary.
- All contractor employees will be trained, as applicable, per the Colorado Regulation No. 8.

APPENDIX 1

OPERATIONS AND MAINTENANCE PLAN

The objective of the Operations and Maintenance (O&M) Plan is to (1) ensure proper clean up of asbestos contamination, (2) minimize future fiber release of friable ACBM, and (3) properly maintain Asbestos Contaminated Building Materials (ACBM) until it is removed. These objectives are accomplished with the following elements:

Notification: All affected persons, including students, staff, faculty, and visiting occupants who may come into contact with the ACBM shall be informed of the location of the ACBM and how and why to avoid disturbing the ACBM.

Surveillance: The Designated Person shall perform a survey of the existing ACBM every six months to assess the condition of existing ACBM. Additionally, building workers should notify the Designated Person of any changes that are observed on existing ACBM.

Work Practices: No work shall be permitted on any work that may potentially disturb existing ACBM without notifying the Designated Person. Any renovation or demolition work involving ACBM will be performed in accordance with Colorado Regulation No. 8. To preclude the risk of airborne asbestos fibers confirmed and assumed asbestos floor tile should not be cleaned with a high speed or abrasive buffer.

Recordkeeping: All O&M activities shall be documented and maintained by Risk Management.

Training: Custodial and maintenance staff shall be trained on asbestos including information on the associated hazards of asbestos and the location of ACBM in the building. Training, which is provided by Risk Management, shall be given to new employees within 60 days after commencement of employment. Sixteen hours of training is required for employees involved in general maintenance and incidental asbestos repair tasks. Two-hour annual awareness training is required for people involved in cleaning and simple maintenance tasks where ACBM may be accidentally disturbed.



APPENDIX 2

RECOMMENDED GUIDELINES FOR THE MAINTENANCE OF ASBESTOS CONTAINING FLOOR COVERING

The Environmental Protection Agency (EPA) recommends that custodial/maintenance personnel consider the following basic guidelines when stripping wax or finish coat from asbestos-containing floor coverings:

- **1. AVOID STRIPPING FLOORS.** Stripping of floors should be done as infrequently as possible -- perhaps once or twice or less per year depending on circumstances. The frequency should be carefully considered as floor maintenance schedules or contracts are written or renewed.
- **2. PROPERLY TRAIN STAFF.** Custodial or maintenance personnel who strip floors should be trained to operate properly and safely the machines, pads, and floor care chemicals used at the facility.
- **3. FOLLOW APPROPRIATE WORK PRACTICES.** Custodial or maintenance personnel who strip floors should follow appropriate work practices, such as those recommended here, under informed supervision. Directions from floor tile and floor wax product manufacturers on proper maintenance procedures should be consulted.
- **4. STRIP FLOORS WHILE WET.** The floor should be kept adequately wet during the stripping operation. Do NOT perform dry stripping. Prior to machine operation, an emulsion of chemical stripper in water is commonly applied to the floor with a mop to soften the wax or finish coat. After stripping and before application of the new wax, the floor should be thoroughly cleaned, while wet.
- **5. RUN MACHINE AT SLOW SPEED.** If the machine used to remove the wax or finish coat has variable speeds, it should be run at slow speed (about 175-190 rpm) during the stripping operation.
- **6. SELECT THE LEAST ABRASIVE PAD POSSIBLE.** EPA recommends that the machine be equipped with the least abrasive pad possible to strip wax or finish coat from asbestos-containing floors.
- **7. DO NOT OVERSTRIP FLOORS.** Stop stripping when the old surface coat is removed. Over stripping can damage the floor and may cause the release of asbestos fibers. Do NOT operate a floor machine with an abrasive pad on unwaxed or unfinished floors,

EPA recommends that you leave asbestos-containing floor covering in place, provided the material is in good condition. However, proper maintenance procedures, such as those outlined above, should always be followed. These guidelines were developed by the U.S.



Environmental Protection Agency in consultation with asbestos control professionals and several flooring material and floor care product manufacturers to reduce any possible exposure to asbestos fibers.