Asbestos Management Policy
University of Wisconsin-Platteville
Reviewed 4/2016

1.0 Purpose
This written program is intended to comply with both state and federal asbestos regulations. Asbestos containing materials were widely used as construction and insulating materials in buildings from the 1940’s through the late 1970’s. Asbestos is present on campus in various forms. Asbestos Containing Materials (ACM) are regulated federally by the Environmental Protection Agency (EPA) and the Occupational Health and Safety Administration (OSHA). In Wisconsin, ACMs are monitored by the Department of Safety and Professional Services (DSPS), the Department of Health Services (DHS), and the Department of Natural Resources (DNR) among others. While asbestos is a serious health and safety concern, currently available data and risk assessments indicate that properly managed, intact asbestos containing materials do not present a significant health risk to building occupants. Therefore, the University’s policies regarding asbestos, focus on providing comprehensive and effective management, rather than total removal. All campus employees are covered by this policy, including limited term employee’s (LTE’s) and student employees.

2.0 Definitions

Asbestos - Includes chrysotile, Amosite, Crocidolite, Tremolite asbestos, anthorphyllite asbestos, Actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.

Asbestos Containing Material (ACM) - Material containing more than 1% asbestos

Authorized Person - Any person authorized by the employer and required by work duties to be present in regulated areas.

Class I Asbestos Work - Activities involving the removal of TSI and surfacing ACM and PACM. This is the most potentially hazardous class of abatement and it usually is not completed within a day.

Class II Asbestos Work - 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 wall board, 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. This is usually completed within a day.

Class IV Asbestos Work - Maintenance and custodial activities during which employees contact but do not disturb ACM or PACM.

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. It is easily damaged or broken apart and dangerous fibers are released into the area.

Non-Friable - Not released into the air unless it is damaged to the extent that when dry it may be crumbled, or pulverized.

Presumed asbestos containing material (PACM)

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Regulated Area- An area established by the employer to demarcate areas where Class I, II, III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos, exceed or there is a reasonable possibility they may exceed the permissible exposure limit.

Thermal System Insulation(TSI)- ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.

Thermal system insulation ACM- thermal system insulation which contains more than 1% asbestos.

3.0 Requirements
Asbestos inspections and abatement activities must be performed in accordance with OSHA CFR1910.1001, 1926.1101 and DHS 159. This also includes the use of only State Certified Inspectors, Abatement Contractors, and air monitoring personnel. The project manager or Facilities Management is responsible for ensuring the abatement contractor meets the state requirements.

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 Risk Management Officer must be notified immediately of any potentially hazardous asbestos situation. The Risk Management Officer 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 Risk Management Officer or a State Certified Asbestos Inspector 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 Risk Management Officer. The recommended guidelines for the maintenance of asbestos containing floor covering should be followed by custodial staff to minimize the potential for airborne asbestos fibers (see Appendix A).

All Class I, II, and III asbestos work shall be conducted within regulated areas. Access to regulated areas shall be limited to authorized persons. All persons entering a regulated area where employees are required to wear a respirator and shall be following the UWP Respirator Policy.

4.0 Responsibilities
The employer shall conduct daily monitoring that is representative of the exposure of each employee who is assigned to work within a regulated area who is performing Class I or II work.

Department Supervisors
- Verify 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.
• Isolate areas in which suspect or confirmed friable ACM is damaged or spilled and notify the Risk Management Officer

Facilities Management
• Obtain the services of qualified asbestos inspectors to perform asbestos inspections, abatement contractors to perform asbestos abatement work, and air monitoring specialists to perform air sampling, as needed
• Barricade areas where suspect or confirmed friable ACM is disturbed or spilled
• Maintain records of asbestos inspections and abatement work on UW-Platteville property
• Maintain records of confirmed ACM in buildings, including material description, location, and condition
• Label identified building ACM locations as required by OSHA CFR1910.1001, 1926.1101 and DHS 159
• Maintain documents of contractor abatement activities
• Verify that any asbestos contractor performing work on site has adequate training
• Verify UW-Platteville employees are adequately notified of and protected from asbestos abatement activities
• Ensure that any type of asbestos work is documented on the project log

Safety Manager
• Investigate potential asbestos exposure incidents
• Ensure appropriate employees are adequately trained as Asbestos Supervisors
• Provide asbestos awareness training to UWP employees

Employees
• Follow requirements of this policy
• Ask if there are any questions about materials they are exposed to
• Report any concerns

5.0 When is Certification Required?
You must be trained and certified before you may disturb or remove more than one waste bag (no larger than 60” by 60” properly filled and sealed) of building materials known or suspected to contain asbestos.

• You must be certified as an asbestos abatement supervisor or asbestos abatement worker, and work for or own a certified asbestos company.
• If your work involves only building operations and maintenance activities that remove no more asbestos-containing or suspect material than would fit in one disposal bag no larger than 60” by 60” properly filled and sealed, you must complete at least a 16 hour asbestos operations and maintenance training course, but certification is not required.
• Suspect materials must be treated as asbestos-containing unless sampled, tested and proven not to be asbestos-containing. Suspect asbestos-containing materials include all untested
building materials, including flooring and mastics, with the exception of metal, glass, wood or fiberglass.

- Training and asbestos certification are required when disturbing or removing suspect asbestos containing materials.
- To test suspect materials, a State Certified Asbestos Inspector will sample the suspected asbestos materials.

6.0 OPERATION AND MAINTENANCE MANAGEMENT METHODS

Only those individuals who have completed the 16-hour O&M Asbestos training and have the appropriate equipment may perform the below O&M response/removal activities. However, everyday maintenance activities that apply to all personnel trained in the two hour course are also described and applicable in this section.

6.1 FLOOR TILE

Floor tile removal shall be limited to 4 tiles requiring mechanical action (gentle prying) to remove, except where tile no longer adheres to the floor. In this case, a maximum of 12 tiles per job can be removed or reglued. If more tiles require work, the area should be abated by an asbestos abatement contractor. Removal jobs that involve a number of tiles that have been broken and pulverized should be handled by an asbestos abatement contractor or as discussed in Section 6.7. Contact the Office of Safety and Risk Management or Facilities Management if questions arise regarding the need for an asbestos abatement contractor.

Wear disposable rubber or latex gloves while working with floor tile and discard with removed material when finished. Before starting a removal, vacuum the affected area with a High Efficiency Particulate Air (HEPA) vacuum. To remove intact tile, wet the surfaces and undersides before and during removal. A sprayer with a 1 ounce (a few drops) detergent to one gallon of water solution should be used to wet the tile. After wetting, a putty knife should be inserted under a tile applying gentle upward pressure, while regularly spraying the underside, until the tile is removed. When finished, wipe the removal area with a wet rag and discard with removed material. Never dry sweep or vacuum an area where ACM had recently been removed. Use a HEPA vacuum for any vacuuming needs. These are designed to catch extremely small particles that would pass through ordinary vacuum filters. Based on exposure evaluations of floor tile work procedures similar to those described above, the Resilient Floor Covering Institute has demonstrated that exposure above the permissible exposure level will not occur when the described methods are used.

If mastic must be removed, thoroughly wet the area with detergent solution and use gentle scraping pressure with a putty knife. If unsuccessful, the material should be abated by an asbestos abatement contractor. Removed material should be double-bagged in plastic bags that are at least 6 mils thick, sealed and labeled as containing asbestos floor tile. Contact the Department of Safety and Risk Management for removal of the bagged material. Refer to the Resilient Floor Covering Institute booklet for further guidance on tile removal.

6.1.1 Floor Tile Drilling
Drilling through floor tile should be done only when the drill is equipped with a HEPA vacuum device. To supplement the HEPA vacuum, drilling could be done through shaving cream. If wet methods are used, care should be taken to assure proper grounding of equipment and use of ground fault interrupter devices. While significant airborne exposure is not likely with HEPA vacuum use, respirator use is still required until the University can provide sufficient monitoring data to demonstrate it is not necessary. Respirator use must comply with the campus respiratory protection policy (Contact the Department of Safety and Risk Management).

6.1.2 Floor Tile Core Drilling
Occasionally, core drilling will be performed through floor tile. Core drilling typically occurs with large amounts of water wetting the drill apparatus. The core drilling site must be secured so passersby cannot contact effluent water. A wet/dry HEPA vacuum must be used to collect effluent water. Care should be taken to assure proper grounding of equipment and use of ground fault interrupter devices. While significant airborne exposure is not likely with wet/dry HEPA vacuum use, respirator use is still required until the University can provide sufficient monitoring data to demonstrate it is not necessary (Negative Exposure Assessment). Respirator use must comply with the campus respiratory protection policy. Gloves and rubber over boots must be worn during drilling and washed or disposed of when the job is over. Contact the Office of Safety and Risk Management for proper disposal of all waste materials.

6.1.3 General Floor Tile Maintenance
ACM Flooring material must be maintained according with the following conditions:

- Sanding flooring material is prohibited.
- Employees stripping finishes must use wet methods and low abrasion pads at speeds lower than 300 revolutions per minute.
- Burnishing or dry buffing may be done only on flooring with enough finish that the pad cannot contact the flooring material.
- Employees must not dust, dry sweep, or vacuum without a HEPA filter in an area containing thermal system insulation or surfacing material or visibly deteriorated ACM.
- Employees must promptly clean up the waste and debris and accompanying dust, and dispose of it in leak-tight, labeled containers.

6.2 MECHANICAL ROOM FLOOR MAINTENANCE
Floor maintenance in mechanical rooms with damaged friable ACM should be performed using only wet methods such as mopping or HEPA vacuum. Dry sweeping should never be done in areas with damaged asbestos-containing Thermal System Insulation (TSI). Vacuuming should be accomplished using a HEPA vacuum. Any damage ACM must be repaired.

6.3 SURFACING
Any asbestos-containing ceiling or wall covering material that may be disturbed during maintenance or repair activity should first be abated unless the activity can be performed with a mini-enclosure and HEPA vacuum designed for the purpose. Follow recommendations for mini enclosure setup in the EPA Operations and Maintenance Manual or OSHA’s rule 29CFR1926.1101 (g) (5) (iv) (instructions for mini-
enclosure use). Respiratory protection, gloves and protective clothing are required for surfacing and mini-enclosure use.

6.4 THERMAL SYSTEM INSULATION

Any removal of asbestos-containing thermal insulation should be done using a glove bag and requires a minimum of two workers. A respirator, disposable full body protective clothing (two), and latex or rubber gloves should be worn during all glove bag work. Material exceeding 3 feet in length or that cannot be contained within a 35 gallon disposal bag must be abated by an asbestos abatement contractor. If insulation must be removed for repairs, a glove bag shall be setup around the material with necessary tools placed inside the bag. A small hole should be made in the bag, and then sealed, to allow insertion of a sprayer nozzle and for a HEPA vacuum nozzle. Before work begins, the bag must be smoke tested to check for leaks. The material should be thoroughly wetted while removal proceeds. When finished, the enclosure should be collapsed under negative pressure from the HEPA vacuum and carefully removed, bagged and labeled as described above. Refer to the EPA Operations and Maintenance Manual or OSHA’s rule 29CFR1926.1101(g)(5).

6.5 ROOFING

The roofing industry has performed a good deal of research on the impact of asbestos-containing roofing on worker exposure and has received a number of interpretations from OSHA that, in some cases, allow relaxed regulatory requirements due to the low potential for unsafe exposure. Contact the Office of Safety and Risk Management if work with ACM roofing materials is required.

6.6 DISCOVERY OF DAMAGED MATERIAL

If damaged material is observed that may be asbestos-containing, the employee should immediately report it to his or her supervisor and isolate the area with warning tape, pylons, etc. Do not touch or disturb the material. Immediately contact Facilities Management and/or the Office of Safety and Risk Management. The department supervisor along with the Office of Safety and Risk Management and Facilities Management may determine that an asbestos abatement contractor should be brought in for clean-up. If the material is friable only those trained in 16-hour O&M are allowed to perform any response work involving contact with the materials. If feasible, the material should be wetted to reduce airborne emission. Employees performing this activity must have completed at least the 2-hour asbestos awareness training course. In the event of large releases or releases to air plenums, immediately contact Facilities Management to have the air handling system shut down. Facilities Management and with the Department of Safety and Risk Management will make a decision regarding evacuation needs and the need for shielding vents and air handlers. Where small sections of loose non-friable tile (2 or 3) are observed to be chipped or loose, duct tape can be used to hold the tile in place until abatement can occur. Notify your supervisor of the damaged tile and wear rubber or latex gloves while taping the tile.

6.7 REPAIR OF DAMAGED MATERIAL

If small scale damage (i.e. less than 1 linear foot) is discovered and cannot be isolated for abatement (as in mechanical rooms) the following should occur or follow specific instructions listed previously in this policy. To be completed only by those trained in 16 hour O&M:
1. Secure the area with tape or other barriers to keep traffic away and arrange for the shut off and sealing of ventilation (if close to supply or return), if necessary.

2. Lightly wet the material with a low pressure sprayer.

3. Put on appropriate protective equipment (for friable material this would include respirator, protective hooded suits/coveralls, and gloves).

4. Clean and bag the debris.

5. HEPA vacuum the area.

When finished cleaning the spill area, lay plastic below the damaged area and proceed to repair the damage with an appropriate encapsulate. Collect fallen debris, then HEPA vacuum again (including outer protective clothing) and double-bag collected debris for disposal. Outer protective clothing should be removed in the work area. Inner protective clothing should be HEPA vacuumed before removing and should be placed in the disposal bag with the other debris.

For releases that exceed 1 linear foot of material, immediately contact Facility Services or EHS. Such releases are to be responded to by an asbestos abatement contractor and will likely require greater isolation practices than with small releases.

7.0 Scope of Asbestos Removal Activity

Asbestos management activity performed by campus staff is limited to that related to operations and maintenance (O&M) as defined by OSHA and the WI Department of Commerce. The campus strives to not subject employees, students, and visitors to asbestos exposures beyond the current permissible exposure level or excursion level, with the goal of being well below those levels. O&M-related removal must be related to a maintenance need and should not exceed 2 hours per day. It cannot be done solely for asbestos abatement. Example of O&M activity included regluing or removal of broken floor tile, removing a small amount of pipe insulation for valve replacement, or drilling through ACM ceiling material to hang a fixture. Removal of asbestos material shall be limited to 3 linear feet. One exception is floor tile that requires no mechanical effort to remove. For example, if 5 or 6 tiles can be lifted by hand and are no longer bound by adhesive, they still can be managed as an operation and maintenance activity due to the low potential for exposure. As a guideline, if more than 12 tiles in an area have become loose such as due to flooding, they should be abated by an asbestos abatement contractor. The amount of material that can be removed through O&M activity shall be further limited to one 35 gallon disposal bag, per employee per day. The campus will retain an asbestos abatement contractor to abate any ACM that cannot be managed through O&M removal. Contractor will be responsible for adhering to legal standards.

In addition, where practical, the campus will attempt to contract ordinary and routine O&M activities to outside contractors.

The following activities related to Asbestos Containing materials are prohibited:

- High speed abrasive disc saws not equipped with a point of cut ventilator or enclosure with HEPA-filtered exhaust air;
- Compressed air to remove asbestos or ACM unless the compressed air is used with an enclosed ventilation system;
- Dry sweeping, shoveling, or other dry clean-up of ACM dust and debris; and
- Employee rotation to reduce asbestos exposure.

### 8.0 Communication of Hazards
Asbestos-containing thermal system insulation that is not encapsulated should be labeled with asbestos warning labels where there is potential for disturbance. Other material such as floor tile and ceiling coatings that contain asbestos should be made known to staff by their respective supervisor, particularly when a work activity has potential to disturb the material. Facilities Management maintains an inventory of ACM on campus. If content of a particular material is unknown, sampling of the material should be arranged by contacting Facilities Management or the Office of Safety and Risk Management. Pursuant to CFR 1926.1101 (K)(6), signage is posted in all mechanical rooms that contain ACM or PACM where employees and contractors can reasonably be expected to enter to alert of asbestos concerns.

### 9.0 Qualifications
Work covered by this policy shall not be performed unless the person performing the work has successfully completed an OSHA 16 hour Asbestos Operations and Maintenance course, or the 2 hour Asbestos Awareness Training whichever is applicable. All maintenance and custodial personnel will receive, at least, 2-hour Asbestos Awareness Training. Annual refresher training is required. Individuals performing any Operations & Maintenance activities or supervising those individuals must have completed the appropriate 16-hour Operations & Maintenance asbestos training and have appropriate equipment.

### 10.0 Scope of Asbestos Removal Activity
Asbestos management activity performed by campus staff is limited to that related to operation and maintenance (O&M) as defined by OSHA and the WI Department of Commerce. The campus strives to not subject employees, students, and visitors to asbestos exposures beyond the current permissible exposure level or excursion level, with the goal of being well below those levels. O&M-related removal must be related to a maintenance need and should not exceed 2 hours per day. It cannot be done solely for asbestos abatement. Examples of O&M activity include regluing or removal of broken floor tile, removing a small amount of pipe insulation for valve replacement, or drilling through ACM ceiling material to hang a fixture. Removal of asbestos material shall be limited to 3 linear feet. One exception is floor tile that requires no mechanical effort to remove. For example, if 5 or 6 tiles can be lifted by hand and are no longer beyond by adhesive, they still can be managed as an operation and maintenance activity due to the low potential for exposure. As a guideline, if more than 12 tiles in an area have become loose such as due to flooding, they should be abated by an asbestos abatement contractor. The amount of material than can be removed through O&M activity shall be further limited to one 35 gallon disposal bag, per employee per day. The campus will retain an asbestos abatement contractor to abate any ACM that cannot be managed through O&M activities to outside contractors. The following activities related to Asbestos containing Materials are prohibited:
• High-speed abrasive disc saws not equipped with a point-of-cut ventilator or enclosure with HEPA-filtered exhaust air;
• Compressed air to remove asbestos or ACM unless the compressed air is used with an enclosed ventilation system;
• Dry sweeping, shoveling, or other dry clean-up of ACM dust and debris; and
• Employee rotation to reduce asbestos exposure.

When asbestos work is being done by a contractor, it shall be ensured that an ‘Occupant Protection Plan’ is posted on the worksite so occupants can see it.

For all Class I jobs, HVAC systems shall be isolated in the regulated area by sealing with a double layer of 6 mil. plastic or the equivalent.

11.0 Abatement Notification
An abatement contractor shall make necessary notifications to regulatory agencies before work begins. Before an abatement project begins, Facilities Management or Housing shall notify building occupants of the dates of removal, type of removal to be performed, any possible hazards, relevant safety information, and contact information for any questions or concerns. Departments receiving these notifications are responsible for conveying the information to their staff and/or other applicable building occupants. Notification of O&M work shall be made to those working near the area of the removal, by staff performing the work, before the job begins. Supervisors should review O&M abatement sites prior to allowing public access to the area.

12.0 Training
A training program is for employees who are exposed to airborne concentrations of asbestos at or above the PEL and/or excursion limit. It is the responsibility of Supervisors to ensure employees participation in the program.

Training shall be provided prior to or at the time of initial assignment and at least annually thereafter. The employees shall be informed of the following:

• Health effects associated with asbestos exposure
• The relationship between smoking and exposure to asbestos producing lung cancer
• The quantity, location, manner of use, release and storage of asbestos, and the specific nature of operations which could result in exposure to asbestos.
• The engineering controls and work practices associated with the employee’s job assignment
• The specific procedures implemented to protect employees from exposure to asbestos, such as appropriate work practices, emergency and clean –up procedures, and personal protective equipment to be used
• The purpose, proper use, and limitation of respirators and protective clothing, if appropriate
• The names, addresses and phone numbers of public health organizations which provide information, materials, and or conduct programs concerning smoking cessation. The employer may distribute the list of such organizations contained in Appendix I to this section, to comply with this requirement
• The requirements for posting signs and affixing labels and the meaning of the required legends for such signs and labels
• The employer shall also provide to employees who perform housekeeping operations in an area which contains ACM or PACM, an asbestos awareness training course, which shall at a minimum contain the following elements: health effects of asbestos, locations of ACM and PACM in the building/facility, recognition of ACM and PACM damage and deterioration, requirements in this standard relating to housekeeping, and proper response to fiber release episodes, to all employees who perform housekeeping work in areas where ACM and/or PACM is present. Each employee shall be trained at least once a year.
• Employees shall have access to information and training materials from the Office of Safety and Risk Management.
• The employer shall make a copy of this standard and its appendices readily available without cost to all affected employees
• The employer shall inform all employees concerning the availability of self-help smoking cessation program material. Upon employee request, the employer shall distribute such material, consisting of NIH Publication No. 89-1647, or equivalent self-help material

13.0 Personal Protective Equipment
Impervious gloves such as rubber or latex should be used when working with ACM and should be discarded with removed material when finished. Respirator use must be consistent with the University’s respiratory protection policy. Users must pass a respiratory health screening, training and fit testing. When disposable protective clothing is worn, it should be discarded with removed material for proper disposal. Contact the Office of Safety and Risk Management for proper selection of respirator and other PPE compliance

14.0 Recordkeeping
The employer shall maintain all employee training records for one year beyond the last date of employment of that employee.

15.0 Floor Tile
Floor tile removal shall be limited to 4 tiles requiring mechanical action (gentle prying) to remove, except where tile no longer adheres to the floor. In this case, a maximum of 12 tiles per job can be removed or re-glued. If more tiles require work, the area should be abated by an asbestos abatement contractor. Removal jobs that involve a number of tiles that have been broken and pulverized should be handled by an asbestos abatement contractor.

16.0 Discovery of Damaged Material
If damaged material is observed that may be asbestos-containing, the employee should immediately report it to his or her supervisor and isolate the area with warning tape, pylons, etc. Do not touch or
disturb the material. Immediately contact the Physical Plant and/or the Office of Safety and Risk Management. The department supervisor along with the Office of Safety and Risk Management and Facilities Management may determine that an asbestos abatement contractor should be brought in for clean-up. If the material is friable only those trained in 16 hour O&M are allowed to perform any response work involving contact with the materials. If feasible, the material should be wetted to reduce airborne emission.

17.0 Medical Surveillance
Medical surveillance under the OSHA standard consists of baseline and annual exams. The physical exams include medical and work history, examination of pulmonary and gastrointestinal systems, pulmonary function

18.0 Waste Disposal
All removed ACM shall be double bagged in 6 mil bags, sealed and labeled with an asbestos warning label. The Office of Safety and Risk Management should be notified of the material location and will make arrangements for disposal. ACM is regulated waste; it must not be placed in dumpsters or disposed as regular trash.
Appendix A

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 from asbestos-containing floors.

5. Run machine at a low speed. If the machine used to remove the wax or finish coat has variable speeds, it should be run at slow speed 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 over strip 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.

8. Sanding flooring material is prohibited.

9. Employees stripping finishes must use wet methods and low abrasion pads at speeds lower than 300 revolutions per minute.

10. Burnishing or dry buffing may be done only on flooring with enough finish that the pad cannot contact the flooring material.

11. Employees must not dust, dry sweep, or vacuum without a HEPA filter in an area containing thermal system insulation or surfacing material or visibly deteriorated ACM.

12. Employees must promptly clean up the waste and debris and accompanying dust, and dispose of it in leak-tight, labeled containers.

Other work practices and engineering controls that shall not be used for work related to asbestos or for work which disturbs ACM or PACM, regardless of measured levels of asbestos exposure or the results of initial exposure assessments:

- High speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air
- Compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture that dust cloud created by the compressed air.
- Dry sweeping, shoveling or other dry clean-up of dust and debris containing ACM and PACM.
- Employee rotation as a means of reducing employee exposure to asbestos.