

42. Personal Protective Actions for Post ACM Abatement

Purpose

- 42.01. Define the standard operating procedures for activities involving the potential for unintended contact; release of and or exposure to Asbestos Containing Material (ACM) in work activities involving installation, servicing and or removal of equipment.

Scope

- 42.02. The extent will reflect the potential existence of none to trace amounts of ACM post abatement and or materials that contain asbestos could possibly be disturbed with fiber release being the result. Activities can be divided into three categories with regard to the potential for disturbing ACM:

42.02.01. Those which are unlikely to involve any direct disturbance of ACM.

42.02.02. Those which may cause unintended disturbance of ACM.

- 42.03. Those which involve intentional minor-scale manipulation or disturbance of ACM.

FPN: Activities beyond minor scale; short duration activities that involve known ACM exposure shall be performed only by specially trained and accredited asbestos control professionals. When similarity in activities exists, this SOP can be employed with the understanding that hazards unrelated or incidental to this procedure can arise. Accordingly, additional hazard analysis and activity steps shall be completed and documented as required.

Authority Matrix

42.04. Executive Director – Physical Plant

42.05. Director Operations

42.06. Shop Supervisors

42.07. Safety Officers

42.08. Assigned Employees

Additional Safety Training Requirements

- 42.09. It is required that employees are properly trained in hazard recognition, use and selection of personal protective equipment; removal, and disposal of protective garments after use. For specific ACM training requirements beyond the scope of this SOP, contact an Abatement Specialist. It is important for Supervisors and or an Abatement Specialist to assess training requirements for ACM related activities.

- 42.10. Training modules required in association with this SOP.

42.10.01. Asbestos Awareness

42.10.02. Protective garment installation, removal and disposal

42.10.03. HEPA vacuum operation

Personal Protective Equipment Requirements

Employees are required to wear personal protective equipment whenever there is the potential to be in contact with and or exposed to ACM levels above permissible levels.

42.11. Protective Garments

- 42.11.01. Protective garments shall be disposable and consist of coveralls or the equivalent that covers all employee personal clothing, head, face and foot covers made of a synthetic fabric which does not allow asbestos fibers to pass through. This type of garments shall prevent employee personal clothing from becoming contaminated with asbestos fibers.
- 42.11.02. Oversize protective garments according to employee personal clothing. The protective garments shall be sized to offer ample room for mobility while completing the activity and to allow for ease of installation and removal.
- 42.11.03. Employee personal clothing that becomes contaminated shall not be transported off campus.
- 42.11.04. Installing the Protective Garments
 - 42.11.04.01. Inspect garments before application.
 - 42.11.04.02. Standing or sitting, step into the legs of the suit; ensure proper placement of the feet within the suit; then gather the suit around the waist.
 - 42.11.04.03. If necessary; seal off limb exit points with duct or similar adhesive tape.
- 42.11.05. Removing the Protective Garments
 - 42.11.05.01. Keep gloves and N100 respirator intact until the removal process is complete.
 - 42.11.05.02. Remove any extraneous or disposable garments, boot covers, outer gloves, and tape. Carefully place approved disposal bag.
 - 42.11.05.03. Remove arms, one at a time from suit avoiding any contact between the outside surface of the suit and the wearer's body and laying the suit out flat behind the wearer. Sitting, if possible, remove both legs from the suit.
 - 42.11.05.04. Carefully dispose suit into an approved bag and seal the bag accordingly.

Note: The employee shall avoid any direct contact with the outside surface of the suit upon removal to avoid any cross contamination.

42.12. Respiratory Protection

- 42.12.01. The selection of approved respirators, suitable for the hazards to which the employee is exposed is authority recommended. Employees are responsible for respirator inspection, cleaning, storage or replacement when found defective. As with protective garments, regulations require the use of respirators whenever employees are exposed, or likely to be exposed, to fiber levels above permissible levels.

Note: When in doubt about the potential release, contact and or exposure during a certain work activities, employees are obligated to take the necessary precautions to protect their wellbeing and it is authority recommended that approved respiratory protection be applied.

42.12.02. The options that shall be available include:

- 42.12.02.01. A half or full face piece, negative pressure, air-purifying respirator equipped with replaceable high-efficiency filters [HEPA].
- 42.12.02.02. N100 disposable cartridge respirator
- 42.12.02.03. Safety glasses
- 42.12.02.04. Full face shields
- 42.12.02.05. Disposable:
 - 42.12.02.05.01. Coveralls or equivalent
 - 42.12.02.05.02. Over the foot covering
 - 42.12.02.05.03. Head cover

Note: Do not use single use, disposable paper dust masks (Aka N95 respirators or the similar) for respiratory protection of ACM.

Procedures for Unintended Release of Hazardous Material

- 42.12.03. If an acute threat to safety and or health is observed or perceived, all personnel shall immediately exit the work area by the nearest means of egress.
 - 42.12.04. Assist injured in the evacuation process if required.
 - 42.12.05. If emergency assistance is required, use either the nearest telephone to call 911 and or contact the UWPD to summon emergency assistance.
 - 42.12.06. Secure work zone.
 - 42.12.07. Contact Supervision and or designated authority.
 - 42.12.08. Contact any Abatement Specialist for further instructions.
 - 42.12.09. For major fiber releases isolate the area and alert building occupants the area should be isolated by closing doors and or erecting temporary barriers to restrict airflow as well as access to the site.
 - 42.12.10. Signs shall be posted as necessary, immediately outside the fiber release site to prevent persons not involved in the cleanup operation from inadvertently entering the area.
 - 42.12.11. If asbestos fibers could enter the HVAC system, the system shall be modified to prevent fiber entry, or shall be shut down and sealed off.
 - 42.12.12. The final step shall be to employ thorough cleanup procedures to properly control the ACM.
- 42.13. Conduct a careful visual inspection and final clearance air monitoring to verify satisfactory cleanup.

Job Hazard Analysis

42.14. In the event any activity is required to be performed in any work areas that either ACM abatement has been performed and or the potential for ACM exposure exists a review of the hazards identified in this standard operating procedure shall be completed. This is an opportunity for any new hazards to be identified, controlled and documented to assist in preventing all incidents.

42.14.01. Major Hazards

42.14.01.01. Operator failure to comply with this procedure

42.14.01.02. Mechanical failure of components causing hazardous material release

42.14.01.03. Unintended release of hazardous material.

42.14.01.04. Airborne contaminants other than identified hazardous material

General Instructions

42.15. Below are basic procedures to minimize and or contain ACM:

42.15.01. Low pressure wet method spray

42.15.02. Use of mini-enclosures.

42.15.03. Use of portable power tools equipped with special local ventilation attachments.

42.15.04. Work area isolation.

42.15.05. HEPA Vacuums

42.15.05.01. The use of special vacuum cleaners, commonly referred to as HEPA (high efficiency particulate air) vacuums, may be preferable to wet cleaning in certain situations. These vacuums are equipped with filters designed to remove very small particles or fibers by filtering those particles from the air passing through the vacuum.

FPN: Use caution when emptying HEPA vacuums and changing the filters because exposures could result from such activities. Before emptying the HEPA vacuums, employees shall move the HEPA vacuum to a physically isolated area of the facility and put on all applicable personal protective equipment before emptying the dust and debris into properly labeled, sealed, and leak-tight containers for disposal as asbestos-containing waste.

42.15.06. Avoidance of certain activities, such as sawing, sanding, and drilling suspect materials without content verification.

42.15.07. If in doubt about the possibility of disturbing ACM during activities, adequate precautions shall be taken to avoid or minimize fiber release.

42.15.08. Supervision shall not issue a work order to an employee that is not fully qualified for these and other related electrical activities.

42.15.09. All contractors shall meet or exceed all training, certification and procedural criteria indicated in this standard operating procedure.

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Procedure Controls

- 42.15.10. Supervisors and or Abatement Specialists shall perform a hazard analysis review upon issuing the work order for the assigned activity. In order to proceed with the activity, all affected employees shall be able to identify the recognized hazards of the activity and what is required eliminate or control those hazards.
- 42.15.11. An annual review of this SOP shall be completed to insure no major changes have occurred for this activity. Affected Supervision and a Safety Authority shall revise as changes are identified.
- 42.15.12. Employees shall report any major changes in the performance of the activity immediately to Supervision or the Safety Authority for review and corrective action.
- 42.15.13. Supervision shall insure all affected employees have received and are current with all applicable safety training and corresponding refreshers that pertain to these activities.

Reference Documents

- 42.16. UWM Safety Program Manual
- 42.17. UWM Asbestos Remediation Procedures
- 42.18. Equipment Manufacturers Operator or Maintenance Manuals
- 42.19. Table of Activity Authority

Table of Activity Authority	Hazard Risk Exposure Potential	
	None to Trace	Eminent
Supervisor Responsibilities		
Pre-work approval from abatement specialist	Yes	Yes
Job hazard analysis	Yes	Yes
Abatement specialist present	No	Yes
HVAC system coordination	Contact abatement specialist	Yes
Work area containment	Contact abatement specialist	Contact abatement specialist
Personal Protective Equipment		
Hard hat	Should	Shall
Safety glasses	Shall	Shall
Face shield	Shall	Shall
N100 respirator	Authority recommended	Shall
Disposable protective suit	Yes	Yes
Work Practices		
Use wet method as control	As required	Yes
Use HEPA vacuum as control	As required	Contact abatement specialist