

Appendix G: Asbestos Fiber Release Procedure

The potential for accidental asbestos fiber release exists in all areas where asbestos is present at the university, particularly in areas with easily accessible or friable asbestos containing materials (ACM), trace ACM (TACM), or presumed asbestos containing materials (PACM), herein referred to as “asbestos materials”. Through the Environmental Health and Safety (EHS) Asbestos Management Program, the risk of fiber release is minimized by means of periodic inspections of asbestos materials for physical integrity and employee awareness training.

Asbestos materials may include, but are not limited to, the following:

- Pipe insulation
- Spray-on Fireproofing
- Acoustical Plaster
- Plaster
- 9-inch x 9-inch floor tiling and associated mastic (adhesive)
- Ceiling tiles and associated mastic (most often 1'x1' ceiling tiles)
- Transite panels (cementitious panels typically used as walls and inside laboratory fume hoods)

Despite periodic inspections and employee training, asbestos materials may still be accidentally disturbed during routine maintenance, construction, or renovation¹ or deteriorated by water damage, air erosion, vibrations or other physical means. In the event that damage does occur, it is crucial to **be familiar with** this emergency response procedure so that exposure to yourself and to students, faculty, staff and other building occupants is reduced to the greatest extent possible.

Each instance of accidental fiber release will vary in size and scope and must be handled on a case-by-case basis. Each release episode, regardless of size and scope, must be reported to EHS as soon as possible. Appropriate training, licensing, and personal protective equipment is required to clean up and repair **all** impacted asbestos materials, whether ACM, TACM, or PACM. As such, only an approved and appropriately qualified contractor may respond to known or potential asbestos fiber releases. Information regarding the handling of ACM, TACM, and PACM can be found within the Asbestos Management Program.

The following procedure should be followed by any person causing damage to asbestos materials or knowledgeable of damaged asbestos materials:

1. Stop all work in the area(s) of damaged asbestos materials.
2. Evacuate the area(s) of damage immediately, including any personnel in the immediate area. If it is safe to do so on your way out, close all windows within the space and doors that lead to other areas. Never re-enter the release area or attempt to clean up the impacted asbestos

¹ If you are ever uncertain whether or not the material you are working on or near contains asbestos, stop work and contact your supervisor and/or appropriate CMU representative. CMU EHS shall be consulted to provide clarification regarding need for bulk sampling prior to proceeding with work—see section 6 of the Asbestos Management Plan for work notification and asbestos bulk sampling requirements.

material(s). It is crucial that this step be performed immediately in order to limit potential exposure.

3. Notify your immediate supervisor and the appropriate CMU representative, if applicable.
4. Report the damage to **CMU EHS at 412-268-8182**. This number is monitored 24/7 to receive emergency EHS phone calls. Be prepared to provide the following information (additional details may be requested at a later time by EHS):
 - a. Location of release [building and room number(s)]
 - b. Date and time of release
 - c. Type and amount of ACM disturbed
 - d. Is the material known or appear to be friable (i.e. can it be reduced to a powder via crushing by hand)?
 - e. Has the immediate release area been evacuated?
 - f. Were doors and windows closed upon evacuating the release area?

Upon receipt of the call, EHS, with the assistance of the CMU work manager or supervisor, will assess and coordinate additional response activities as necessary, including: evacuation of additional areas and/or the entire building, further isolation of the release area, cleanup activities, and re-entry approval.

EHS responsibilities upon receiving an accidental fiber release notification are generally as follows:

1. Gather information regarding the release from the person making the report.
2. Immediately notify EHS personnel overseeing the Asbestos Management Program. Those personnel will complete and/or direct the remaining steps.
3. Notify EHS Director.
4. Determine additional needs to contain fiber spread, such as modification of the HVAC system to restrict air flow to and from the affected area. As necessary, if the HVAC system cannot be modified, the affected area should be completely sealed so that fibers cannot escape from the affected area—any work to seal the space from the inside must be conducted by an approved contractor appropriately trained and/or licensed for the work.
HVAC alteration and containment actions should be based on:
 - a. The amount of asbestos material impacted;
 - b. The location of disturbed asbestos material with respect to the air handling system and overall air plenum;
 - c. Accessibility to the area by building occupants; and,
 - d. The amount of fibers potentially released (e.g. friable versus non-friable).
5. With assistance from the EHS Director, notify and evacuate, if needed, any occupied areas immediately adjacent to the release area and/or areas that could have reasonably been impacted by the fiber release.

Notification should also be made to the occupants of evacuated spaces. See **Figure 1** for an example e-mail notification that can be sent to department managers for distribution to their personnel.

Figure 1. Building Occupant Notification E-mail Example

Subject Line: [Location of Area(s) Impacted by Fiber Release] Asbestos Disturbance

Dear _____:

Test results have confirmed that asbestos was present in floors XX of XXX Hall. However, preliminary air quality test results throughout XXX Hall have revealed that no asbestos particles were released within the air space of the building. Please note that asbestos is not considered to be harmful unless it is disturbed and that the preliminary air quality results have determined that there was no disturbance. The final report from PSI (the company that performed the testing) is expected to be released late next week. Until this final report is issued declaring XXX Hall safe to re-enter, the building will remain closed.

If laptop computers are needed by staff in order to be able to perform work responsibilities during this time, please let me know. Environmental Health and Safety will be contacted to retrieve only essential computer equipment. Additionally, the Unified Communications Team is currently working to address off-site provisioning of phone capabilities to enable Undergraduate Admission staff to field calls during the holiday break.

XXX will be making arrangements for the asbestos to be abated. Please be assured that the process to abate the asbestos from floors XX-XX will be performed using the highest standards of safety and care. Additional third parties will be brought in to perform air monitoring, cleaning of spaces and replacement of air filters.

If you should have any discomfort or would like to make any alternate work arrangements once the abatement process begins, please let me know and we will coordinate accordingly.

Thank you for your continued patience, professionalism and resiliency throughout this process.

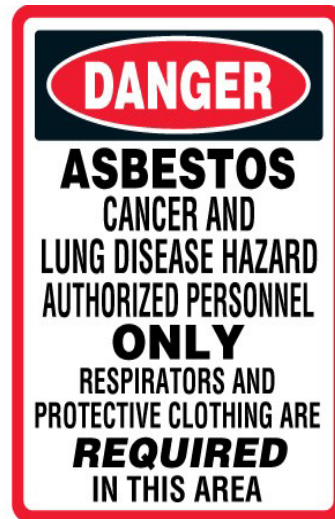
[Include your signature here.]

6. Post signage, as necessary, surrounding the release area to restrict access and prevent unintended entry by those not involved in response efforts. University Police may be contacted for assistance with heightened security as necessary. Sample signage may be seen in **Figures 2** and **3**.

Figure 2. Access Control Signage



Figure 3. Access Control Signage



7. Update evacuated personnel with information regarding the status of response efforts and when they can expect to be allowed to re-enter their spaces.
 - a. During cleanup activities, if building occupants need to obtain critical work materials, coordination may be made with Enterprise Risk Management, Disaster Recovery and Business Continuity so items can be safely obtained and alternate work locations can be organized. Depending on the severity of the asbestos disturbance, it may not be appropriate for personal item retrieval until clean-up is completed.
8. Assist work manager to engage approved and aptly trained contractor to clean up affected materials and any additional abatement as appropriate.

Clearance air sampling should be coordinated by the work manager in accordance with state and federal regulations relevant to the abatement performed and additionally throughout the building as deemed necessary by EHS to confirm satisfactory cleanup.

Tape-lift or micro-vacuum samples of dust may be required if it is suspected that a major release of fibers was circulated throughout the building to ensure asbestos fibers have not settled in remote locations, thus prompting further cleanup.
9. After clean-up and applicable air sampling confirms satisfactory clean-up, communicate to evacuated building occupants that it is safe to re-enter. All posted signage should be removed.
10. EHS will document activities regarding the event. As applicable, the following should be included:
 - a. Date and time of the accidental damage (if known)
 - b. Date and time of the report
 - c. Name, e-mail, and phone number of person reporting the incident
 - d. Location (building name and room number(s))
 - e. Type of material disturbed
 - f. Identify if the material is friable or non-friable
 - g. Reason for the incident

- i. If applicable, did the person causing the damage attend asbestos awareness training within the past year?
- h. Actions taken to prevent the spread of fibers
- i. Areas of building evacuated
- j. Name of abatement contractor used for cleanup and all supporting disposal documentation
- k. Date of clean-up
- l. Air sampling results
- m. Names and contact information of persons who are concerned about possible exposure to asbestos fibers as related to the accidental release.

Work managers, supervisors, etc. should be contacted to identify other personnel who may have had access to the area and/or may have been present that may not be aware of the release.

- i. CMU employees and paid students must fill out a Supervisor’s Injury and Illness form and submit to Human Resources.
- ii. CMU students (unpaid) must fill out applicable sections of the Supervisor’s Injury and Illness form and submit to EHS at safety@andrew.cmu.edu.

Reporting potential exposure to airborne asbestos fibers:

After it is confirmed that asbestos material was impacted and you suspect that you were potentially exposed to airborne asbestos fibers, you should report the exposure to your immediate supervisor and EHS. Additionally, you must also complete a Supervisor’s Injury/Illness report (<https://cms-staging.andrew.cmu.edu/ehs-2/Workplace-Construction/documents/WCforms.pdf>) so that the exposure is documented. Employees should send the form to Human Resources and students should submit to EHS.

EHS will supply a copy of incident investigation records as applicable.

Revisions

Date	Documented Changes	Initials
4/27/2022	Minor Wording Edits	CG