

Updated 3/29/2024



Asbestos Maintenance and Operations Program

UNC CHARLOTTE
9201 UNIVERSITY CITY BLVD., CHARLOTTE, NC 28223

Table of Contents

I. Purpose	1
II. Scope	1
III. Responsibilities	1
IV. Definitions	2
V. Exposure Limits and Monitoring	3
VI. Regulated Areas	4
VII. Methods of Compliance	4
X. Training	5
XI. Asbestos Emergency Procedures	6
XII. Medical Surveillance	7
XIII. Records	7

I. Purpose

The purpose of this program is to comply with the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1001 Asbestos. UNC Charlotte's goal is to provide guidelines for managing asbestos to prevent exposure to employees.

II. Scope

This program applies to all employees who have occupational exposure to asbestos. This program does not apply to renovation or construction work. All renovation and construction projects in buildings with asbestos containing materials (ACM) or presumed asbestos containing materials (PACM) should refer to the UNC Charlotte Facilities Management Design and Construction Manual for guidance.

III. Responsibilities

A. Executive Leadership

1. UNC Charlotte has legal responsibility for compliance with the occupational safety and health standards.

B. Program Administrator

The Environmental Health and Safety (EHS) Office is responsible for:

1. Planning and recommending programs that adhere to all applicable federal, state, and local laws and regulations pertaining to environmental health and safety.
2. Assisting supervisors with implementing environmental health and safety programs in their areas.
3. Curtailing or stopping work that poses a clear and imminent danger to the health or safety of the University community.
4. Periodically reviewing the program and updating it as needed to ensure compliance with all applicable federal and state regulations.

C. Departmental Management

Management is responsible for:

1. Planning and developing budget requests for departmental safety programs.
2. Developing safety procedures, work practices, and safe working areas for all those under their supervision.
3. Supporting safety and health as a model to those they supervise.
4. Supplying appropriate equipment and training.

5. Enforcing environmental health and safety regulation by invoking disciplinary action or administrative sanction.

D. Employees

Every UNC Charlotte employee is responsible for conducting himself/herself in accordance with this program. All employees shall:

1. Adhere to all safety policies, programs, procedures, and practices while performing his/her duties in a safe manner.
2. Notifying your immediate supervisor of unsafe working conditions, potential hazards and accidents as soon as possible.

IV. Definitions

- A. Asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.
- B. ACM means any material containing more than 1% asbestos.
- C. Assistant Secretary means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.
- D. Authorized person means any person authorized by the employer and required by work duties to be present in regulated areas.
- E. Building/facility owner is the legal entity, including a lessee, which exercises control over management and record keeping functions relating to a building and/or facility in which activities covered by this standard take place.
- F. Certified Industrial Hygienist (CIH) means one certified in the practice of industrial hygiene by the American Board of Industrial Hygiene.
- G. Director means the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designee.
- H. Employee exposure means exposure to airborne asbestos that would occur if the employee were not using respiratory protective equipment.
- I. Fiber means a particulate form of asbestos 5 micrometers or longer, with a length-to-diameter ratio of at least 3 to 1.
- J. High-efficiency particulate air (HEPA) filter means a filter capable of trapping and retaining at least 99.97 percent of 0.3 micrometer diameter

mono-disperse particles.

- K. Homogeneous area means an area of surfacing material or thermal system insulation that is uniform in color and texture.
- L. Industrial hygienist means a professional qualified by education, training, and experience to anticipate, recognize, evaluate and develop controls for occupational health hazards.
- M. PACM means “presumed asbestos containing material.”
- N. Presumed asbestos containing material means thermal system insulation and surfacing material found in buildings constructed no later than 1980. The designation of a material as "PACM" may be rebutted pursuant to paragraph (j)(8) of this section.
- O. Regulated area means an area established by the employer to demarcate areas where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limits.
- P. Surfacing ACM means surfacing material which contains more than 1% asbestos.
- Q. Surfacing material means 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 on surfaces for acoustical, fireproofing, and other purposes).
- R. Thermal System Insulation (TSI) means ACM applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain.
- S. Thermal System Insulation ACM means thermal system insulation which contains more than 1% asbestos.

V. Exposure Limits and Monitoring

- A. UNC Charlotte employees are not permitted to conduct work activities where asbestos is capable of being released in airborne concentrations at or above the TWA permissible exposure limit and/or excursion limit under the expected conditions of processing, use, or handling. If changes occur, UNC Charlotte will initiate monitoring practices in accordance with OSHA Asbestos standard requirements.
- B. If monitoring is required, UNC Charlotte will provide affected employees or their designated representative an opportunity to observe any monitoring of employee exposure to asbestos. All requirements for

protective clothing and equipment must be complied with.

- C. Additionally, any employee who suspects exposure to asbestos shall convey information concerning the presence, location and quantity of such material to their supervisor and the EHS Office immediately following as soon as feasible within 24 hours of the discovery.

VI. Regulated Areas

- A. Regulated areas are defined as an area established by the employer to demarcate areas where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed the permissible exposure limit (PEL). The only areas that meet this definition are contracted renovation/demolition work projects in buildings that possibly contain asbestos. These projects require asbestos surveys and must meet all state construction office guidelines including, but not limited to, signage demarcating, restricting access, work practices, and engineering controls to minimize occupational exposure.

VII. Methods of Compliance

- A. All regulated areas are monitored by qualified trained professionals in accordance with applicable regulatory requirements.
- B. The automotive brake and clutch repair areas do not inspect, disassemble, repair, or assemble asbestos containing brakes or clutches. If changes occur, UNC Charlotte will initiate monitoring practices in accordance with OSHA Asbestos standard requirements.
- C. Mechanical rooms where asbestos containing materials are located shall be maintained in a condition that does not result in exposure. Maintenance employees should report damage to asbestos containing materials to their immediate supervisor and EHS as soon as feasible so repairs can be coordinated to prevent release of materials.
- D. The general housekeeping employee is not permitted to clean surfaces contaminated with asbestos. Housekeeping employees should report suspected asbestos containing materials to their immediate supervisor and EHS as soon as feasible so repairs can be coordinated to prevent release of materials.
- E. All spills and/or sudden releases of ACM/PACM (sometimes referred to as a fiber release episode) shall be reported immediately to EHS.
- F. Surfaces contaminated with asbestos may not be cleaned with compressed air.

- G. HEPA-filtered vacuuming equipment shall be used for all vacuuming operations.
- H. Dry sweeping and dry cleanup methods of asbestos is prohibited.
- I. All waste, scrap, debris, bags, containers, equipment, and clothing contaminated with asbestos shall be collected, stored, and disposed of in sealed, impenetrable container.
- J. Asbestos containing flooring material shall not be sanded, burnished, or dry buffed. Stripping of finishes is allowed using only low-abrasion pads at less than 300 rpm.

VIII. Respiratory Protection, Protective Clothing, Equipment, Hygiene Facilities and Practices

- A. UNC Charlotte employees are not permitted to conduct work activities where asbestos is capable of being released in airborne concentrations at or above the TWA permissible exposure limit and/or excursion limit under the expected conditions of processing, use, or handling. Therefore, employees are not required to wear respirators, protective clothing, equipment, hygiene facilities and practices. If changes occur, UNC Charlotte will provide respirators, protective clothing, and equipment in accordance with OSHA Asbestos standard requirements.

IX. Communicating of Hazards to Employees

- A. EHS maintains an inventory of the presence, location and quantity of asbestos in buildings built prior to 1980. The mechanical rooms in which employees are reasonably expected to enter and which contain asbestos, a warning sign is posted. Asbestos labels will be affixed to all containers of raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers.
- B. The housekeeping and maintenance employees are informed of the asbestos inventory.

X. Training

- A. All housekeeping and maintenance employees performing housekeeping or maintenance in work environments that have the potential for exposure at or above the OSHA airborne concentration PEL receive asbestos awareness training initially and annually thereafter.
- B. Additional training may be required for employees who have or may be exposed to airborne concentrations of asbestos at, or above the PEL and/or excursion limits.

XI. Asbestos Emergency Procedures

- A. 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 ACM or PACM. Through the EHS Asbestos Maintenance and Operations Program, the risk of fiber release is minimized by means of periodic inspections of asbestos materials for physical integrity and employee awareness training.
- B. Asbestos materials may include, but are not limited to, the following:
1. Pipe insulation
 2. Spray-on Fireproofing
 3. Acoustical Plaster
 4. Plaster
 5. 9-inch x 9-inch floor tiling and associated mastic (adhesive)
 6. Ceiling tiles and associated mastic (most often 1'x1' ceiling tiles)
 7. Transite panels (cementitious panels typically used as walls and inside laboratory fume hoods)
- C. Despite periodic inspections and employee training, asbestos materials may still be accidentally disturbed during routine maintenance, construction, or renovation 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 emergency procedures so that exposure to yourself and to students, faculty, staff and other building occupants is reduced to the greatest extent possible.
- D. 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 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 and PACM can be found within the Asbestos Maintenance and Operations Program.
- E. **The following procedure should be followed by any person causing damage to asbestos materials or knowledgeable of damaged asbestos materials:**
1. Stop work immediately and leave the area.
 2. Secure the area by closing and locking the doors.
 3. Never re-enter the release area or attempt to clean up the impacted material.

4. Notify your immediate supervisor and EHS at 704-687-1111 or by submitting a Safety Hazard Form at <https://safety.charlotte.edu/contact-us>. If the emergency occurs outside normal working hours, contact Police & Public Safety at 704-687-2200.
 5. Be prepared to provide the following information (additional details may be requested later by EHS):
 - a. Location of release
 - 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 been evacuated
 - f. Were doors and windows closed upon evacuating the area
- F. Upon receipt of the call, EHS will assess and coordinate additional response activities as necessary, to include evacuation of additional areas and/or the entire building, further isolation of the release area, cleanup activities, and re-entry approval.

XII. Medical Surveillance

- A. UNC Charlotte employees are not permitted to conduct work activities where asbestos is capable of being released in airborne concentrations at or above the TWA permissible exposure limit and/or excursion limit under the expected conditions of processing, use, or handling. Therefore, employees are not required to be enrolled in a medical surveillance program. If changes occur, UNC Charlotte will create a medical surveillance program in accordance with OSHA Asbestos standard requirements.

XIII. Records

- A. All employee asbestos exposure monitoring records shall be retained for at least 30 years.
- B. All employee medical surveillance records shall be retained for at least 30 years.
- C. All employee training records shall be retained for the duration of

employment plus 1 year.

- D. Air sampling records shall be retained for the duration of employment of the people involved plus 30 years and for the duration of building ownership; whichever occurs last.
- E. All documentation in reference to this document, shall be retained for the duration of building ownership and transferred to the new owners.
- F. Records will be made available upon request.