



Cornell University
Environmental
Health and Safety

HS16 Asbestos Management

Occupational Health, Safety and Injury Prevention

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1.0 INTRODUCTION

- 1.1 Asbestos is a naturally occurring mineral that was widely used as a binding agent and insulating material.
- 1.2 Cornell University Buildings may contain asbestos materials such as floor tiles, mastics, HVAC duct tape, pipe insulation, roofing, spray-applied ceiling textures, ceiling tiles and drywall taping compounds.
- 1.3 When intact and undisturbed, asbestos containing materials do not pose a health risk to people working or living in these buildings.
- 1.4 Disturbing asbestos containing materials may result in airborne asbestos fibers.
- 1.5 Inhalation of asbestos fibers may cause illness including asbestosis, lung cancer and mesothelioma.

2.0 OBJECTIVES AND METRICS

- 2.1 The Cornell University Asbestos Management Program has been established to ensure that asbestos containing material (ACM) is appropriately managed to minimize potential health risks to the University community. Asbestos abatement may be required in advance of building renovation/repair, building demolition or when ACM is found to be damaged.
- 2.2 The Cornell University Asbestos Management Program will meet all federal and state regulatory requirements including:
 - 29CFR 1910.1001 OSHA Asbestos General Industry Standard
 - 29CFR 1926.1101 OSHA Asbestos Construction Standard
 - NYS Industrial Code Rule 56
 - NESHAPS (EPA) 40 CFR Part 61
 - NYSDEC Regulations Part 364
 - TSCA (EPA) 40 CFR Part 763
 - University Policy 8.6 Environment, Health and Safety
- 2.3 EHS will review and update the written program every 3 years or sooner if required by regulatory changes.

3.0 APPLICABILITY

- 3.1 The Asbestos Management Program applies to all Cornell University employees, contractors and facilities, except those at the Weill Medical College.

4.0 ROLES AND RESPONSIBILITIES

4.1 University Administration

- 4.1.1 University Administrators provide senior management support for implementing the Asbestos Management Program and ensure that resources are allocated for implementing this program.

4.2 Environmental, Health and Safety (EHS)

- 4.2.1 The Cornell University Department of Environmental Health and Safety develops and

oversees the implementation of the Asbestos Management Program and supports the program by:

- a. Providing information to the University administration to support decisions on the asbestos management program
- b. Identifying and communicating legal, regulatory and policy requirements associated with the program
- c. Establishing, implementing, and maintaining the written Asbestos Management Program
- d. Responding to employee and student asbestos concerns
- e. Approving all asbestos awareness safety training
- f. Providing expertise and guidance to departments to maintain compliance with regulatory requirements and university policy
- g. Recommending appropriate response actions to control or eliminate potential hazards
- h. Auditing asbestos abatement projects and consultant activities, as necessary
- i. Communicating with regulatory agencies
- j. Auditing programs overseen by Asbestos Coordinators
- k. Review submittal of asbestos-free documentation provided per section 7 and provide approved submittals to the Asbestos Coordinator.

4.2.2 EHS has the authority to enforce the Asbestos Management Program requirements.

4.3 Deans, Directors and Department Heads

4.3.1 Ensuring compliance with the University's Asbestos Management Program

4.3.2 Requesting asbestos inspections and/or asbestos abatements through the Asbestos

4.3.3 Coordinator prior to conducting projects or other work likely to disturb suspected asbestos material

4.3.4 Ensuring Building Contacts circulate communications received from EHS and Asbestos Coordinators to all affected occupants within building

4.4 Facilities Management

4.4.1 Cornell University Facilities Services supports the Asbestos Management Program by:

- a. Providing resources to serve as asbestos coordinator(s)
- b. Hiring asbestos abatement contractors and consultants
- c. Coordinating responses to incidental and emergency disturbances
- d. Maintaining records for asbestos surveys and asbestos abatement projects
- e. Maintaining asbestos inventory
- f. Provide resources to facilitate a campus wide inventory as funding is available.
- g. Approving and maintaining the list of approved consultants and contractors that are used for any asbestos activities
- h. If Cornell University Facility Services begins to provide asbestos services of Air/Project Monitoring, Project Design, Inspector; a restricted asbestos license will need to be applied for from NYS Department of Labor.

4.5 Asbestos Coordinator

4.5.1 Procure services of licensed abatement contractors and consultants for projects involving disturbance or removal of ACM

4.5.2 Ensure abatement projects and consultant activities under jurisdiction are properly monitored

- 4.5.3 Determine the presence and location of ACM prior to initiating activities that could disturb building materials through the review of inspection reports and asbestos inventory
- 4.5.4 Procure licensed inspectors for sampling/inspection
- 4.5.5 Provide written disclosure of the presence of ACM and PACM to project manager
- 4.5.6 Maintain inventory of known asbestos information including new construction material submittal received from EHS.
- 4.5.7 Oversee and interpret all monitoring and survey data
- 4.5.8 Renew campus wide variances from NYS DOL and EPA
- 4.5.9 Ensure abatement contractor provides required notification prior to asbestos abatement

4.6 Project Managers

- 4.6.1 Cornell University project managers and facility coordinators in charge of maintenance, renovation, or other activity where asbestos containing materials may be present have the following specific responsibilities:
 - a. Identifying, with the assistance of the Asbestos Coordinator, asbestos containing building materials prior to maintenance, renovation or other activities where asbestos containing materials may be disturbed
 - b. Notifying prospective contractors bidding for work whose employees can be expected to work in areas containing ACM of the presence, location and quantity of ACM.
 - c. Contracting with approved licensed asbestos consulting firms and abatement contractors in close consultation with the Asbestos Coordinator
 - d. Issuing service requests for asbestos-related services
 - e. Immediately reporting any incidental disturbances of asbestos containing material as defined section 5.4
 - f. Scheduling project dates with sufficient lead times for asbestos abatement
 - g. Ensuring contractor provides documentation to support all new buildings and building renovation projects are asbestos-free as specified in section 7 and submit such documents to EHS
 - h. Submit all asbestos abatement and inventory documentation to the Asbestos Coordinator

4.7 Unit Facilities/Building Representative (UF/BR)

- 4.7.1 Review work requests and evaluate potential for work requested to impact ACM/PACM
- 4.7.2 Promote accomplishment of facilities work in accordance with this program
- 4.7.3 Identifying, with the assistance of the Asbestos Coordinator, asbestos containing building materials prior to maintenance, renovation or other activities where asbestos containing materials may be disturbed
- 4.7.4 Scheduling project dates with sufficient lead times for asbestos abatement
- 4.7.5 Where projects may impact or disturb ACM notify contractor or Cornell personnel performing the work of presence of ACM
- 4.7.6 Maintain required asbestos signage as specified in section 6.0.

4.8 Procurement Services

- 4.8.1 Procurement Services will maintain language in specifications and contracts notifying all contractors of the presence of asbestos in University buildings, requirement to use

asbestos-free material and to provide documentation that material is asbestos-free.

4.9 Facilities Contracts

4.9.1 Facilities contracts will maintain contractual language in general conditions or general requirement notifying all contractors of the: 1) presence of asbestos at the University, 2) the requirement to use asbestos-free material and 3) the requirement of the contractor to provide documentation that the material is asbestos-free

4.9.2 Management of bid process for asbestos, renovation and construction projects

4.10 Employees

4.10.1 Cornell University staff including the skilled trades, utility workers and building care staff often work around asbestos containing materials and have the following responsibilities:

- a. Cornell University employees are not to disturb asbestos containing materials
- b. Recognizing and reporting damage to asbestos containing materials to their supervisor including reporting incidental disturbance of asbestos containing material as outlined in section 5.4 Incidental Disturbance
- c. Reading and complying with all asbestos labels and signs
- d. Custodial staff must follow department procedures for proper asbestos floor tile care
- e. Attending annual asbestos awareness training

5.0 REQUIREMENTS

5.1 Asbestos Surveys

5.1.1 Current EPA and NYSDOL regulations require an asbestos survey to be completed for any demolition or renovation projects. This obligation is met by utilizing a third party asbestos certified inspection firm and is managed within the Infrastructure, Property and Planning Unit. Contractors involved in construction of new buildings or renovation of existing buildings are contractually obligated to certify material used in the project is asbestos-free and provide asbestos-supporting documentation in the form of the Manufacturer's Safety Data Sheet that the material is free of asbestos.

5.1.2 Where the University possesses documentation from the material manufacturer that indicates the potentially asbestos containing material is asbestos-free such information may be utilized in lieu of analytical sampling.

5.1.3 NYS Code Rule 56, Subpart 56-5.1(f) provides a listing of potential asbestos containing building materials. A subset of this list can be found on the EHS Asbestos webpage. Suspect asbestos containing materials that are not sampled and lack clear manufacturer information must be assumed to be asbestos containing and treated as such. Further guidance regarding suspect material can be found in Standard Operating Procedure HS16_ASB_SOP001 Potential Asbestos Containing Building Materials.

5.1.4 A number of buildings have asbestos inventory summaries posted on the Infrastructure Properties and Planning facility information page. Additional information may be available from the Asbestos Coordinator. Asbestos surveys can be scheduled by contacting Customer Service at 255-5322 and having a Service Request issued to the Asbestos Coordinator.

5.1.5 Vermiculite Containing Material

- a. Building material containing vermiculite with no information on the mining source or the source is Libby Montana will be treated as follows:
 - i. Bulk or loose fill vermiculite will be treated as asbestos containing material
 - ii. Vermiculite products other than sprayed on fire-proofing containing greater than 10% vermiculite will be treated as asbestos containing material
 - iii. All surfacing material [sprayed-on, troweled-on, or otherwise applied to surfaces(acoustical or finish plaster on ceilings and walls) and fireproofing materials on structural members] containing vermiculite must be analyzed using an approved NYDOH analytical method or treated as asbestos containing material.
 - iv. Consult with EHS for vermiculite from mines other than Libby Montana.

5.2 Asbestos Abatement

- 5.2.1 Any asbestos that may be impacted by the renovation, maintenance, repair, investigation or demolition activity must be abated prior to the commencement of such activity. Asbestos abatement and repair must be performed by a licensed asbestos abatement contractor.
- 5.2.2 Asbestos abatement and repair services are typically managed through the Asbestos Coordinator. To initiate an asbestos abatement or repair project, contact Customer Service at 255-5322 to have a Service Request generated. Large scale renovation or demolition projects asbestos abatement may be contractually managed by the project General Contractor.
- 5.2.3 Asbestos survey and project records shall be provided electronically to the asbestos coordinator upon completion of the project.
- 5.2.4 Projects involving endowed college buildings in Ithaca City limits require permitting from Ithaca City.
- 5.2.5 Projects involving contract college buildings require permitting by the University Code Enforcement representative.

5.3 Code Rule 56, In-Plant Operations, Asbestos Abatement

- 5.3.1 Cornell University is an independent private institution chartered by act of the New York State Legislature (chapter 585 of the Laws of 1865), operating four contract colleges on behalf of the State of New York pursuant to Article 115 of the Education Law. The University is expressly granted custody and control over all contract college facilities by the Education Law. For purposes of Subpart 56-11.1, any contract college facilities are Cornell premises by virtue of such custody and control. Cornell University is the employer for all contract college facilities, and the University is not a political subdivision of the State, a public authority or other governmental agency. Cornell's contract college facilities meet the qualifying criteria of subpart 56-11.1(b), and accordingly In-Plant Operations may be used in those facilities.

5.4 Incidental Disturbance

- 5.4.1 An incidental disturbance is defined as the unintentional disturbance of ACM or PACM. The clean-up of an incidental disturbance must be conducted by a licensed asbestos abatement contractor. An environmental consultant under the direction of the Asbestos Coordinator will oversee the clean-up response. EHS can provide assistance as needed.
- 5.4.2 In the event an employee discovers an incidental disturbance of asbestos, the following

protocol shall be followed:

- a. Do not attempt to clean up the ACM or PACM
- b. Immediately vacate the room and restrict access to room using signage and barrier/caution tape
- c. Issue an emergency Request for Service to the Asbestos Coordinator by contacting Customer Service at 255-5322. State that you have an “asbestos incidental disturbance”
- d. Outside of normal business hours, call CU Police at 255-1111 to report an asbestos incidental disturbance or emergency.

5.4.3 For additional information regarding the incidental disturbances and asbestos related emergencies see Standard Operating Procedure HS16_ASB_SOP002 Asbestos Incidental Disturbances and Emergency Response.

6.0 NOTIFICATIONS

6.1 Building Occupant Notification

- 6.1.1 In accordance with OSHA regulations, all mechanical spaces in pre-1980 buildings must be posted with information on the ACM and PACM that is found within the space. The Building Coordinator will be responsible for ensuring postings are maintained in accordance with Standard Operating Procedure HS16_ASB_SOP003 Asbestos Labeling.
- 6.1.2 The Asbestos Coordinator and asbestos abatement contractor are responsible for ensuring that notice is provided to residential and business occupants. The notice shall be posted to residential or business occupants of the building ten (10) calendar days prior to the commencement of large scale projects and three (3)calendar days prior to commencement of small and minor scale projects.

6.2 Regulatory Agency Notifications

- 6.2.1 NYS Department of Labor – asbestos abatement contractor contracted to engage in a large asbestos project shall notify, in writing, the Asbestos Control Bureau and include the appropriate nonrefundable fee.
- 6.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) - The NESHAP regulation states that either the owner of the building or contractor of the demolition or renovation operation can submit the notification. Large (>160sqft and/or >260 linear ft) asbestos project require NESHAP notification for demolition or renovation of PACM, friable, and/or Category I & II non-friable that has/or can become friable.
- 6.2.3 The abatement contract shall contact the NY State Asbestos Control Bureau verbally or in-person to request approval to conduct emergency asbestos abatement. The contractor will follow-up with written notification within three days.

6.3 Contractor Notification

- 6.3.1 Prior to arriving on campus to work, contractors will have been notified about the presence of asbestos containing materials through their contract documents which will give notice of the possibility of encountering asbestos containing materials. Contractors will ensure that all employees and subcontractors know of the possibility of encountering asbestos containing materials

6.4 Long Term Labeling Strategy

6.4.1 It is the long term strategy of the University to label known asbestos containing material where such labeling is feasible and beneficial to the building occupants. Labeling will be consistent with Standard Operating Procedure HS16_ASB_SOP003 Asbestos Labeling.

7.0 NEWLY INSTALLED MATERIAL

7.1 All new installations performed by third party contractors will meet Cornell University General Requirement section 01 35 29 part 1.3. Procurement, Project Managers, Construction Managers and Building Coordinators will ensure that all building materials, insulation, roofing material, etc. are asbestos-free and will require documentation to support verification of asbestos-free material.

7.1.1 Documentation will be material Safety Data Sheet (SDS)

7.1.2 If SDS does not provide adequate information then samples of actual material will need to be obtained and analyzed by approved asbestos analytical lab

8.0 TRAINING

8.1 All Cornell employees who have the potential to impact asbestos containing materials as part of their regular job duties shall receive annual asbestos awareness training. Training topics shall include the health hazards associated with asbestos exposure, location of ACM and PACM in buildings/facilities, recognition of damage and deterioration, housekeeping practices and proper response to asbestos emergencies.

8.2 Groups that typically require asbestos awareness training include custodial staff, maintenance workers, trades personnel, CIT field services, building coordinators and utilities personnel.

8.3 Asbestos awareness training can be scheduled by contacting EHS at 255-8200 or by signing up on-line at <http://www.ehs.cornell.edu>.

9.0 RECORDS AND DOCUMENT CONTROL

9.1 Records pertaining to asbestos surveys and asbestos abatement projects are maintained by the Asbestos Coordinator in accordance with state and federal asbestos regulations.

9.2 Asbestos Awareness training records are maintained in the Cornell Learning Management System.

Course Number	Course Name
CU-2384	Asbestos Awareness
TBD	Asbestos Awareness for Project Planning

10.0 DEFINITIONS

10.1 Asbestos Containing Material (ACM) - Any material containing greater than one percent (1%) of asbestos.

10.2 Presumed Asbestos Containing Material (PACM) - All Thermal System Insulations and Surfacing Materials found in buildings constructed no later than 1980. PACM is considered to be ACM unless proven otherwise by appropriate bulk sampling and laboratory analyses.

10.3 EHS – Environmental Health and Safety

10.4 Friable - Any material that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure, or is capable of being released into the air by hand pressure.

10.5 Non-Friable - Any material that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure, and is not capable of being released into the air by hand pressure.

10.6 Incidental Disturbance - The unintentional disturbance of ACM or PACM.

11.0 REFERENCES

11.1 Cornell Asbestos Web Page: <https://sp.ehs.cornell.edu/osh/occupational-health/asbestos/Pages/default.aspx>

11.2 29CFR 1910.1001 OSHA Asbestos General Industry Standard

11.3 29CFR 1926.1101 OSHA Asbestos Construction Standard

11.4 NYS Code Rule 56

11.5 40 CFR Part 61, Subpart M. EPA Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP)

11.6 Cornell University Policy 8.6 Environment Health and Safety

12.0 DOCUMENT HISTORY

Date	Change	Made by
	Initial Document	