



# INDIANA UNIVERSITY

OFFICE OF THE EXECUTIVE VICE PRESIDENT  
FOR UNIVERSITY ACADEMIC AFFAIRS  
University Environmental Health and Safety

## Asbestos Management Program

April 27, 2017

### 1. INTRODUCTION

#### 1.1. Purpose

Indiana University Environmental Health and Safety (IUEHS) has developed this Program to identify practices and procedures for the management of asbestos-containing materials (ACM) on all Indiana University campuses in accordance with OSHA [29 CFR 1926.1101](#) and [1910.1001](#).

#### 1.2. Scope

This Program covers all work activities that have the potential to disturb asbestos-containing materials. Those activities include routine maintenance and operation activities; renovations or demolition; new construction-related activities; information technology services; electronic security services; and abatement activities for damaged asbestos-containing materials or for other activities in which contact with ACM may occur.

### 2. AUTHORITY AND RESPONSIBILITY

#### 2.1. University Environmental Health and Safety (IUEHS) is responsible for:

- 2.1.1. Developing and maintaining the Asbestos Management Program;
- 2.1.2. Conducting field inspections of renovation and demolition projects to identify the presence and location of asbestos-containing materials;
- 2.1.3. Providing details to UAO and/or Maintenance Groups on the type, extent, and plan for asbestos removal prior to the start of renovation or demolition work;
- 2.1.4. Procuring the services of licensed asbestos consultants;
- 2.1.5. Providing primary oversight during asbestos abatement projects;
- 2.1.6. Coordinating abatement activities with construction schedules;
- 2.1.7. Reviewing construction specifications and/or drawings to determine building components that will be impacted by construction or maintenance;
- 2.1.8. Conducting basic asbestos awareness training;
- 2.1.9. Managing the asbestos building survey data for each respective campus;
- 2.1.10. Providing professional and technical knowledge and expertise to manage asbestos abatement projects for customers;
- 2.1.11. Attending renovation and demolition project meetings;
- 2.1.12. Ensuing asbestos-related project work is completed according to specifications and regulations;
- 2.1.13. Ensuring employees who conduct Class I, II, III, IV asbestos work receive annual medical surveillance;
- 2.1.14. Ensuring employees who conduct Class I, II, III, IV asbestos work are fit-tested for respirator use annually; and
- 2.1.15. Reviewing personal and area sample results daily during asbestos abatement activities.

**2.2. University Architects Office and Maintenance Groups** are responsible for:

- 2.2.1. Notifying IUEHS of projects that have the potential to disturb suspect asbestos-containing materials;
- 2.2.2. Collaborating with IUEHS to design and schedule asbestos abatement during project work;
- 2.2.3. Collaborating with IUEHS to establish project budgets and accurate financial records regarding the abatement of asbestos-containing materials;
- 2.2.4. Disclosing the presence of asbestos-containing materials (ACM) to contractors and/or vendors; and
- 2.2.5. Notifying IUEHS of building occupant concerns related to potential asbestos exposure.

**2.3. Bloomington Campus – Facility Operations** are responsible for:

- 2.3.1. Conducting field inspections to identify the presence and location of asbestos-containing materials prior to O&M activities;
- 2.3.2. Performing Class II, Class III, Class IV, or emergency asbestos work;
- 2.3.3. Performing personal air monitoring, and area monitoring when appropriate, for employees conducting day-to-day O&M removal;
- 2.3.4. Notifying IUEHS prior to the start of O&M removal;
- 2.3.5. Notifying IUEHS of any work requiring the removal of greater than 160 linear feet, 260 square feet, or 35 cubic feet of asbestos-containing materials;
- 2.3.6. Providing IUEHS with copies of all air monitoring results;
- 2.3.7. Disclosing the presence of asbestos-containing materials (ACM) to contractors and/or vendors;
- 2.3.8. Ensuring employees who perform Class II, Class III, Class IV, or emergency asbestos work receive annual training, medical surveillance, and respirator fit testing; and
- 2.3.9. Notifying IUEHS of building occupant concerns related to potential asbestos exposure.

**2.4. IUPUI and Regional Campuses – Facility Operations** are responsible for:

- 2.4.1. Notifying IUEHS when work activities may disturb suspect asbestos-containing materials;
- 2.4.2. Notifying IUEHS in the case of an emergency where there is a potential for fiber release from damaged ACM;
- 2.4.3. Disclosing the presence of asbestos-containing materials (ACM) to contractors and/or vendors based on IUEHS reporting;
- 2.4.4. Notifying IUEHS of building occupant concerns related to potential asbestos exposure.

**2.5. Employees**

- 2.5.1. Reporting damaged suspect building materials to IUEHS for the respective campus;
- 2.5.2. Avoiding the disturbance of known asbestos-containing materials and building materials; and
- 2.5.3. Attending training if required.

### 3. PROGRAM ELEMENTS

#### 3.1. General Information

A majority of the university buildings have been surveyed for the presence and location of asbestos-containing materials. IUEHS currently maintains a database with locations of asbestos-containing materials. Before disturbing any suspect asbestos-containing materials, contact IUEHS to determine if a material contains asbestos.

Suspect asbestos-containing materials include, but are not limited to the following:

Floor tile and associated mastic	Ceiling tile	Wall plaster
Pipe insulation	Wall/Ceiling treatment (such as plaster and other textured or acoustical applications)	Spray-on Fireproofing
Boiler insulation	Roofing materials	Transite lab hoods and bench tops
Electrical panels	Switch gear and panel boards	Mastics of all types including carpet, chalkboard
Fire doors	Duct insulation	Gaskets and ropes

Examples of activities that may result in the disturbance of suspect asbestos-containing materials include:

- Removing or repairing floor tile;
- Drilling into floor tile;
- Removing or repairing ceiling tiles;
- Removing pipe insulation or pipe joint compound to access pipes;
- Creating holes in plaster ceilings or walls;
- Removing floor tile and or carpet which has mastic underneath it; and/or
- Removing or replacing windows.

#### 3.2. Abatement Projects

All asbestos abatement projects at IU will be managed by IUEHS and shall be performed under controlled conditions by licensed asbestos abatement workers.

#### 3.3. Operations and Maintenance Activities

##### 3.3.1. IUPUI and Regional Campuses

IUEHS shall be notified of asbestos-related emergencies and when any activities will result in the disturbance of suspect asbestos-containing materials.

Indiana University employees shall not remove or disturb any suspect asbestos-containing materials until the materials have been sampled by IUEHS and it has been determined that they do not contain asbestos.

Removal of asbestos-containing materials will be conducted by the IU Asbestos Abatement Team or a licensed Asbestos Abatement Contractor that has been approved by IUEHS.

### **3.3.2. Bloomington Campus**

Indiana University employees, shall not remove or disturb any suspect asbestos-containing materials until the materials have been sampled by the IU Facility Operations Asbestos Supervisor or IUEHS and it has been determined that they do not contain asbestos.

IU Facility Operations employees, who are licensed asbestos workers, may remove asbestos-containing materials for Operations and Maintenance work. Operations and Maintenance work is defined by IUEHS as the removal of asbestos-containing material in quantities less than 160 linear feet, 260 square feet, or 35 cubic feet. Anything greater than these quantities requires a notification to the Indiana Department of Environmental Management (IDEM) and is considered project work.

All asbestos removal requiring a notification will be conducted by the IU Asbestos Abatement Team or a licensed Asbestos Abatement Contractor that has been approved of by IUEHS.

#### ***Operations and Maintenance Workflow***

- 3.3.2.1. When an IU employee is assigned a work order which may potentially disturb asbestos-containing materials, the employee shall contact the IU Facility Operations Asbestos Supervisor to determine if the building material(s) to be impacted contain asbestos;
- 3.3.2.2. The IU Facility Operations Asbestos Supervisor shall determine if the materials contain asbestos by utilizing asbestos inspection records or by collecting a bulk sample;
- 3.3.2.3. If materials contain asbestos, a notification will be sent to IUEHS;
- 3.3.2.4. If the materials to be removed are less than the notification limits identified above, an IU employee licensed asbestos worker under the supervision of the IU Facility Operations Asbestos Supervisor will complete the removal.

### **3.4. Renovation, Demolition, and Construction Projects**

University Architects Office, Project Managers and Maintenance units shall notify IUEHS during the design phase of all renovation, demolition, or construction activities.

IUEHS shall evaluate materials which will be disturbed during the project to identify all asbestos-containing materials involved.

If it is determined that asbestos removal is required for the project to proceed, IUEHS shall make arrangements for the removal of the asbestos-containing materials.

UAO and/or Project Managers shall be responsible for notifying building occupants of upcoming abatement activities.

#### **4. TRAINING & RECORDKEEPING**

All employees who may come in contact with asbestos shall receive training consistent with the Occupational Safety and Health Administration (OSHA) Class IV asbestos worker training requirements. Training is required for all Facilities Services Operations and Maintenance staff, Building Services, University Architects, Project Managers, and Maintenance Units.

**4.1.** Employees shall be trained in the following by representatives from IUEHS on the following topics:

- Asbestos standard (29 CFR 1910.1001);
- Asbestos abatement projects;
- Background information on asbestos;
- Health effects related to asbestos exposure;
- Preventing exposure to asbestos;
- Methods for controlling asbestos fiber release; and
- Asbestos abatement basics.

**4.2.** Licensing

All asbestos abatement workers, supervisors, inspectors, and project designers shall receive and maintain licensing and certifications per the requirements of the State of Indiana.

#### **5. REFERENCES**

[OSHA 1910.1001](#)

[OSHA 1926.1101](#)

UAO Asbestos Guide Specifications

#### **6. REVISIONS**

New Document: February 1, 2016

Updated: April 26, 2016

Updated: April 27, 2017

## APPENDIX A – GLOSSARY

**Asbestos:** a naturally occurring fibrous mineral which is mined from the earth as one of many varieties including chrysotile, amosite, crocidolite, tremolite, anthrophyllite and actinolite. It is different from other minerals in that its crystals form long, thin, needle like fibers. Its high tensile strength, resistance to heat and chemicals make it an ideal binder in certain building materials.

**Asbestos Containing Materials (ACM):** any building material containing greater than 1 percent asbestos.

The Environmental Protection Agency identifies 3 basic categories of ACBM:

1. Thermal System Insulation, such as pipe cover, pipe fitting cover, tank cover, boiler cover;
2. Surfacing Materials, such as spray-on fire proofing, troweled on or spray-on acoustic treatments; and
3. Miscellaneous, such as floor tile, mastic, ceiling tile, roofing, and transite.

**Class I Asbestos Work:** activities involving the removal of thermal system insulation and surfacing ACM and PACM.

**Class II Asbestos Work:** activities involving the removal of asbestos-containing materials (ACM) which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

**Class III Asbestos Work:** repair and maintenance operations, where asbestos-containing materials are likely to be disturbed.

**Class IV Asbestos Work:** maintenance and custodial activities during which employees contact but do not disturb asbestos-containing materials or presumed asbestos-containing materials, and activities to clean up dust, waste, and debris results from Class I, II, and III activities.

**Maintenance Groups:** Facilities Services, Facility Operations, Physical Plant, Real Estate, Residential Program Services or other University departments that conduct renovations and maintenance activities.

**Presumed Asbestos Containing Materials (PACM):** thermal system insulation and surfacing material found in buildings constructed no later than 1980.

**Suspect Asbestos Containing Materials:** applications or materials not clearly defined as “presumed asbestos containing material” that is suspected of being asbestos-containing. This includes materials commonly known to have been manufactured with asbestos such as; paper products, cloth and woven products, cement products, various matrix products, inadvertent asbestos contamination, and miscellaneous products and consumer products possibly containing asbestos.