



## Asbestos Management Plan

Public Safety Department  
Environmental, Health and Safety (EHS) Division  
Standard Operating Procedure (SOP) #36

# Lafayette College Asbestos Management Plan

Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

## Table of Contents

1.0 Introduction .....	1
2.0 Scope .....	1
3.0 Program Administration .....	1
4.0 Permissible Exposure Limit (PEL) .....	2
5.0 Asbestos Identification .....	3
6.0 Classification of Asbestos Work .....	8
7.0 Class I, II and III Asbestos Work (Licensed Contractors/Consultants) .....	10
8.0 Class IV Asbestos Work .....	11
9.0 Building Inspection and Surveillance of ACM on Campus .....	13
10.0 Work Practices .....	14
11.0 Disposal of Asbestos Waste .....	16
12.0 Employee Notification .....	17
13.0 Labeling .....	17
14.0 Medical Surveillance .....	17
15.0 Respiratory Protection .....	18
16.0 Training .....	18
17.0 Contractor Awareness .....	18
18.0 Emergency Response Procedures .....	14
19.0 Recordkeeping .....	15

# Lafayette College Asbestos Management Plan

## Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

### **1.0 Introduction**

The Lafayette College Asbestos Management Program has been developed to comply with the requirements of the Occupational Safety and Health Administration (OSHA) Asbestos Standards for General Industry (29 CFR 1910.1001) and Construction (29 CFR 1926.1101), and the Environmental Protection Agency (EPA) Title 40 Parts 61 and 763.

Lafayette College is committed to the health and safety of the entire campus community (employees, students and visitors). Due to the presence of asbestos-containing materials (ACM) in various buildings located on the College Campus, this plan includes a number of elements which are designed to protect College employees, students, visitors, contractors, and other building occupants from potential exposure to asbestos and to ensure ACM will be handled in compliance with all applicable federal, state and local regulations. The objectives of this asbestos management program include the inspection and identification of asbestos-containing materials (ACM), hazard communication, training, and maintenance and repair or removal of ACM in Lafayette College-owned facilities.

### **2.0 Scope**

The Lafayette College Asbestos Management Program is administered by Public Safety's Environmental, Health & Safety (PSEHS) Division. An Environmental, Health & Safety Specialist serves as the Asbestos Coordinator and Program Administrator. Program requirements apply to all College-owned buildings and employees (including contracted employees) performing maintenance, repair and housekeeping services. In addition, all capital planning, construction, renovation and demolition projects are subject to the provisions of this program. Plant Operations and Facilities Planning & Construction shall contact PSEHS in the initial planning stages of a project to reduce the potential for regulatory liability and to ensure an adequate source of funding in the project budget to address asbestos issues. The Asbestos Coordinator shall be notified prior to physically disturbing any building material, structure or other potential asbestos-containing building material (ACBM).

### **3.0 Program Administration**

Public Safety's Environmental, Health & Safety Division shall be responsible for administration of the Asbestos Management Program. Various departments across campus may be affected by the provisions of this program, including:

- Plant Operations
  - Mechanical Trades
  - General Trades
  - Steam Plant
  - Custodial Services
  - Grounds
- Facilities Planning & Construction
- Public Safety

Contractors performing work for the College are also affected by the provisions of this program, to the extent that they shall be made aware of the existence of and proper handling of Asbestos Containing Building Materials and that such material will be handled in accordance with this document.

# Lafayette College Asbestos Management Plan

## Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

### **A. Environmental, Health & Safety – Asbestos Management**

Public Safety's Environmental, Health & Safety Division is responsible for the development, implementation and administration of the Asbestos Management Program, including but not limited to:

- Asbestos Management Program direction and implementation;
- Developing, implementing, and conducting and/or facilitating appropriate; asbestos training programs (2-hour asbestos awareness)
- Coordinating response to all emergencies on campus involving ACM;
- Coordinating all asbestos building surveys and inspections;
- Reviewing all asbestos abatement projects for compliance;
- Employee notification;
- Management and oversight of activities performed by asbestos consultants; and,
- Maintaining all records and documentation pertaining to asbestos compliance.

The Program Administrator will be an EHS Specialist for Lafayette College. Since the College is not covered under the Asbestos Hazard Emergency Response Act (AHERA) (Schools K-12), there are no regulatory training requirements for this position. However, it shall be policy that the Asbestos Coordinator complete, at a minimum, the OSHA 2-Hour Asbestos Awareness Training and have the knowledge and experience related to asbestos and asbestos regulatory requirements to successfully administer the program. Other beneficial and recommended training includes the EPA AHERA Self-Study Guide, which is an acceptable form of training certification for AHERA Asbestos Coordinators; and/or completion of the EPA AHERA Building Inspector/Management Planner training course and certification.

#### **4.0 Permissible Exposure Limit (PEL)**

OSHA has established a permissible exposure limit (PEL) for airborne asbestos concentration of 0.1 fibers per cubic centimeter (f/cc) for an eight (8) hour time-weighted average; no employee may be exposed above this level without proper personal protective equipment (PPE), medical surveillance, etc.

#### **5.0 Asbestos Identification**

##### Location of Asbestos-Containing Material (ACM) on Campus

The College conducted surveys and inspections of its academic, residential and athletic buildings for ACM, under contract with SSM Group, Inc. in 2011. Evidence has been documented, based on these inspection reports, that the following buildings contain, or may contain, ACM.

##### **Academic Buildings**

- Colton Chapel
- Chateau Chavaniac
- Ord Steam Plant
- 214 North Bank Building
- 228 North Green Building (exterior ACM only)
- Bailey Health Center (floor tile mastic only)
- Ramer History House (building renovated and all known ACM removed at that time. Based on a visual inspection/walkthrough by SSM, some bulk sampling of suspect ACM is required prior to any future work)
- Hamilton Street Art Studio

# Lafayette College Asbestos Management Plan

## Public Safety Department – Environmental, Health and Safety (EHS) Division

### Standard Operating Procedure (SOP) #36 – Revised March 2012

---

- Acopian Engineering Center (building renovated and all known ACM removed at that time. Based on a visual inspection/walkthrough by SSM, some bulk sampling of suspect ACM is required prior to any future work)
- Olin and Hugel Science Facilities (building renovated and all known ACM removed at that time. Based on a visual inspection/walkthrough by SSM, some bulk sampling of suspect ACM is required prior to any future work)
- Skillman Library (building renovated and all known ACM removed at that time. Based on a visual inspection/walkthrough by SSM, some bulk sampling of suspect ACM is required prior to any future work)
- Markle Hall
- Pardee Hall
- Van Wickle Hall
- Kirby Hall Of Civil Rights
- Hogg Hall
- Kunkle Hall
- Feather House (building renovated and all known ACM removed at that time. Based on a visual inspection/walkthrough by SSM, some bulk sampling of suspect ACM is required prior to any future work)
- 714 Sullivan Road (Scott Hall)

#### **Residential Buildings**

- Lerch House (light heat shields only)
- Farber Hall
- Watson Hall
- P.T. Farinon House (building renovated and all known ACM removed at that time. Based on a visual inspection/walkthrough by SSM, some bulk sampling of suspect ACM is required prior to any future work)
- Conway House
- Alpha Phi Sorority
- Pi Beta Phi Sorority
- 2 West Campus
- 4 West Campus
- Easton Hall (flue patch insulation only)
- Marquis Hall
- South College (Basement Only)
- Ruef Hall
- Watson Courts
- 511 College Avenue
- McKelvy House
- Reeder House
- McKeen Hall
- Gates Hall
- Soles Hall
- Kirby House
- Hamilton House
- 719 Sullivan Road
- The Spot
- 901 Bushkill Drive (Former Hummel Lumber)
- President's House

# Lafayette College Asbestos Management Plan

Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

## **Athletic Buildings**

- A.P. Kirby Sports Center

## **Off-Campus Student Housing**

- 511 Hamilton Street
- 616 Parsons Street
- 630 Parsons Street
- 634 Parsons Street
- 100 Cattell Street
- 501 Clinton Terrace
- 513 High Street
- 623 Monroe Street
- 633 Parsons Street
- 41 McCartney Street
- 43 McCartney Street
- 45 McCartney Street
- 115 McCartney Street
- 117 McCartney Street
- 119 McCartney Street
- 123 McCartney Street
- 131 McCartney Street
- 215 McCartney Street
- 219 McCartney Street
- 223 McCartney Street
- 225 McCartney Street
- 322 McCartney Street
- 412 McCartney Street
- 414 McCartney Street
- 416 McCartney Street
- 418 McCartney Street
- 420 McCartney Street
- 422 McCartney Street
- 434 McCartney Street
- 509 High Street
- 514 March Street
- 517 Clinton Terrace
- 518 Clinton Terrace
- 518 March Street
- 519 High Street
- 520 Clinton Terrace
- 520 March Street
- 522 March Street
- 524 Clinton Terrace
- 615 Monroe Street
- 617 Monroe Street
- 619 Monroe Street
- 620 Monroe Street
- 621 Monroe Street
- 623 Parsons Street
- 624 Monroe Street

# Lafayette College Asbestos Management Plan

Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

- 624 Parsons Street
- 625 Monroe Street
- 626 Monroe Street
- 626 Parsons Street
- 627 Monroe Street
- 628 Monroe Street
- 629 Monroe Street
- 630 Monroe Street
- 631 Monroe Street
- 632 Monroe Street
- 632 Parsons Street
- 633 Monroe Street
- 634 Monroe Street
- 636 Monroe Street
- 638 Monroe Street
- 641 Parsons Street
- 643 Parsons Street

## **Off-Campus Faculty Housing**

- 704 Burke Street
- 3301 Bushkill Drive
- 3401 Bushkill Drive
- Biddel Barn (Bushkill Drive)
- 106 Cattell Street
- 122 Cattell Street
- 306 Cattell Street
- 426 Clinton Terrace
- 156 College Avenue
- 168 College Avenue
- 521 Hamilton Street
- 525 Hamilton Street
- 543 Hamilton Street
- 625 Hamilton Street
- 518 Hart Street
- 521 High Street
- 129 McCartney Street
- 404 McCartney Street
- 406 McCartney Street
- 408 McCartney Street
- 410 McCartney Street
- 424 McCartney Street
- 500 McCartney Street
- 502 McCartney Street
- 506 McCartney Street
- 510 McCartney Street
- 514 McCartney Street
- 219 North Third Street
- 248 North Third Street
- 1 Nevin Terrace

# Lafayette College Asbestos Management Plan

## Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

- 2 Nevin Terrace
- 3 Nevin Terrace
- 4 Nevin Terrace
- 138 Nevin Terrace
- 614 Parsons Street
- 620 Parsons Street
- 621 Parsons Street
- 625 Parsons Street
- 627 Parsons Street
- 640 Parsons Street
- 630 Pierce Street
- 321 Porter Street
- 2804 Sullivan Trail
- 3416 Sullivan Trail

If suspect materials are identified, and evidence of previous sampling cannot be confirmed in previous reports, or prior to renovations, the following steps shall be taken to identify and confirm the existence or non-existence of ACM.

### Visual Inspection

A visual inspection (walkthrough) shall be conducted in the building/spaces in question, to identify suspect ACM and confirm, either through previous documentation or sampling, that the materials are ACM or non-ACM. Once confirmed, any materials identified as ACM shall be quantified and locations/type of material documented and, if removal is not necessary, the materials shall be periodically re-inspected for change in condition.

### Bulk Sampling/Material Assumptions

If previous documentation is not found to confirm a suspect material as ACM or non-ACM, the material can either be sampled or assumed to contain asbestos. A material cannot be assumed not to contain asbestos; bulk sampling is the only method to determine if a material does not contain asbestos. Materials that are commonly assumed to contain asbestos, based upon inspector's experience or manufacturer's labeling, are certain types of Thermal Pipe Insulation, "Transite" Cement Board, 9" x 9" floor tiles and adhesives, or any materials where sampling is either unpractical or will ruin the integrity of the material. When collecting bulk samples, only Pennsylvania licensed Asbestos Building Inspectors shall collect samples, and EPA sampling requirements and procedures shall be followed. As mentioned below under Classification of ACM, any material containing greater than 1% asbestos as determined by laboratory analysis is classified as ACM.

### Laboratory Analysis/Qualifications

Following the collection of bulk samples, the suspect materials are labeled, properly documented on a laboratory chain of custody, and submitted to a qualified lab for analysis. The typical, most common analysis method for asbestos bulk samples is Polarized Light Microscopy (PLM). This meets EPA AHERA requirements for suspect material analysis; if additional analyses are required to identify asbestos in certain types of materials, they will be approved by the Asbestos Coordinator prior to analysis. Prior to soliciting the services of a laboratory for asbestos analysis, the laboratory shall first be pre-qualified and must hold the following credentials: the laboratory must be accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) and the American Industrial Hygiene Association (AIHA). During the recent asbestos surveys and subsequent sample analysis, SSM group, Inc. used the services of EMSL Analytical, Inc. located



# Lafayette College Asbestos Management Plan

## Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

in Plymouth Meeting, PA and Cinnaminson, NJ. EMSL is accredited as a NVLAP and AIHA laboratory.

### **6.0 Classification of Asbestos-Containing Materials (ACM)**

The National Emissions Standard for Hazardous Air Pollutants (NESHAPs) and the Asbestos Hazard Emergency Response Act (AHERA) define an asbestos-containing material as any material containing greater than 1% asbestos as determined by laboratory analysis. ACM is classified by three (3) general uses, and three (3) categories of friability.

#### General Uses

1. Thermal System Insulation (TSI) – ACM applied to pipes, fittings, boilers, breeching, tanks, and any other components designed to prevent heat loss or gain. These materials are almost always considered “friable materials”.
2. Surfacing Materials – ACM that is sprayed, troweled, or otherwise applied to surfaces for fireproofing, acoustical, and decorative purposes, etc. (i.e. spray-on fireproofing on beams/decking, acoustical ceiling). These materials are also almost always considered “friable materials”.
3. Miscellaneous Materials – Any ACM that is not included in the two (2) categories above. This list of ACM is very long and diverse and can include both “friable” and “non-friable” materials.

#### Friability Categories

1. Friable ACM – Any material containing greater than 1% asbestos that, when dry, can be crumbled, pulverized or otherwise reduced to powder by hand pressure. These materials are typically applied to ceilings, walls, structural members, mechanical system components; examples include TSI, spray-on fireproofing, acoustical insulation, acoustical ceiling tiles, etc.
2. Non-Friable ACM - Any material containing greater than 1% asbestos that, when dry, cannot be crumbled, pulverized or otherwise reduced to powder by hand pressure. This category is broken down into two (2) sub-categories:
  - Category I Non-Friable ACM – asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing greater than 1% asbestos
  - Category II Non-Friable ACM – any material, excluding Category I ACM, containing greater than 1% asbestos; examples include “transite” cement board/piping, lab table tops, mastics and adhesives, etc.

The Occupational Safety and Health Administration (OSHA) has defined specific categories for various types of asbestos work. These categories are used in part to determine the level of training, personal protective equipment, work area preparation and engineering controls necessary to safely perform asbestos related work. These four (4) OSHA classes of work involving ACM are defined as follows.

Class I Asbestos Work – activities involving the removal of thermal system insulation (TSI) and surfacing ACM and presumed asbestos containing material (PACM). Class I asbestos work can only be performed by certified and licensed asbestos abatement workers. It is protocol to procure the services of a pre-qualified licensed asbestos abatement firm whose employees possess the appropriate training and certification under OSHA and EPA (see Section V below). The College does not utilize any in-house asbestos abatement workers.

Class II Asbestos Work – activities involving the removal of 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 various adhesives and mastics. Class II asbestos work can only be performed by certified and licensed asbestos

# Lafayette College Asbestos Management Plan

## Public Safety Department – Environmental, Health and Safety (EHS) Division

### Standard Operating Procedure (SOP) #36 – Revised March 2012

---

abatement workers. It is protocol to procure the services of a pre-qualified licensed asbestos abatement firm whose employees possess the appropriate training and certification under OSHA and EPA (see Section V below). The College does not utilize any in-house asbestos abatement workers.

Class III Asbestos Work – activities involving repair and maintenance operations where ACM, including thermal system insulation and surfacing ACM and PACM, is likely to be disturbed. Class III asbestos work (minor removals) can be performed by workers who are certified as asbestos O&M workers, with training sufficient to meet OSHA requirements. It is the College's protocol to procure the services of a pre-qualified licensed asbestos abatement firm whose employees possess the appropriate training and certification under OSHA and EPA (see Section V below). Lafayette does not utilize any in-house asbestos workers.

Class IV Asbestos Work – involves maintenance and custodial activities during which employees contact, but do not disturb, ACM and PACM. Class IV asbestos work can be performed by workers who have received, at a minimum, the OSHA 2-hour asbestos awareness training requirements. PSEHS is responsible for coordinating and conducting and/or facilitating the annual 2-hour asbestos awareness training to all maintenance and custodial staff, and any other workers whose duties may put them in contact with ACM, and for maintaining records of all training.

#### **7.0 Class I, II and III Asbestos Work (Licensed Contractors/ Consultants)**

Lafayette College does not perform OSHA Class I, II or III work in-house, and it is College protocol to procure the services of a pre-qualified licensed asbestos abatement firm whose employees possess the appropriate training and certification under OSHA and EPA. **All projects involving asbestos abatement, or potential for disturbance of ACM, shall be coordinated through the Asbestos Coordinator.** The College has established contracts with pre-qualified and approved asbestos abatement contractors (for all projects involving asbestos abatement) and independent (third party) asbestos abatement project monitoring firms (for oversight and regulatory compliance monitoring, visual inspections, air monitoring, etc.).

#### Asbestos Contractor Pre-Qualification Procedures

Asbestos abatement contractors are selected through a Request for Proposal (RFP) process in which the firm's technical capability is evaluated, in addition to pricing. Contractors are required to submit the following documentation, in their RFP, as part of the pre-qualification process:

1. Company name, address, contact information, and a list/breakdown of company principles, owners, etc.
2. Current Health and Safety Plan, including Respiratory Protection Program and Medical Surveillance Program, or a certified letter stating that your company is in compliance with all applicable regulatory requirements related to asbestos abatement and personal protection. Any other related training certifications that may be applicable can also be submitted (i.e. confined space, HAZWOPR, etc).
3. Copy of current Asbestos Contractor License(s) for Pennsylvania, and any other federal, state, or local licenses that may apply. All asbestos-related work performed at the College must be performed by PA licensed asbestos abatement workers, supervisors, and contractors.
4. List the major projects completed in the last three (3) years under the present company name and organizational structure. Provide references of the Owner, Client (if different from Owner), Third Party Environmental Monitoring Firm (if applicable), and any other references that may be available (Construction Manager, etc.).

# Lafayette College Asbestos Management Plan

## Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

5. Submit a financial statement, audited if available, including the latest balance sheet, and income statement showing current assets and liabilities; and provide the name of firm preparing the statement and provide bank references, bonding/insurance references, etc.
6. Provide information on any projects that Contractor failed to complete and the reason for failure; and provide information on any citations or violations Contractor has received in the past five (5) years, including the outcome and, if applicable, a statement on how Contractor has changed procedures, etc. to assure compliance
7. Current Certificate of Insurance to meet the insurance requirements established by Owner.

The information must be submitted to:

Public Safety  
Environmental, Health & Safety  
Lafayette College  
11 Marquis Hall  
730 Sullivan Road  
Easton, PA 18042

### **8.0 Class IV Asbestos Work**

There are certain departments where designated employees are not required to handle, but may come into contact with the presence of ACM (defined as Class IV work by OSHA). Applicable employees shall receive two (2) hour Asbestos Awareness Training on an annual basis. This can be accomplished by on-line training, video training, live training, or other methods that meet the OSHA regulatory requirements for asbestos awareness training, and also include site-specific information on ACM, or how to obtain site-specific information. This training must be documented and records kept of each employee trained for at least 30 years.

These departments include, but are not limited to:

#### ***A. Plant Operations (Mechanical Trades, General Trades, Steam Plant, Custodial Services and Grounds Crew)***

Plant Operations has varying responsibilities that include, but are not limited to, the installation, operations and maintenance of plumbing systems, HVAC systems, lighting and fixtures, painting, minor construction, fire suppression and alarm systems, etc. Such duties can result in employees entering and performing work in areas known to have ACM.

Housekeeping and janitorial activities are provided by the Custodial Services in each building on a daily basis, and department employees typically have the most familiarity with the building; however, custodial personnel may not be aware of all locations of ACM in the building in which they work. Employees clean all areas of campus, polish and wax floors; remove trash and move equipment and furniture on a limited basis. Employee activities may involve tasks performed in areas known to have ACM.

Employees should contact PSEHS immediately at 610-330-5330 if damaged ACM is identified. Workers shall not attempt to clean up any suspect debris or dust; but shall notify PSEHS for the proper assessment and remediation.

# Lafayette College Asbestos Management Plan

Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

## **B. Facilities Planning & Construction**

Facilities Planning and Construction is comprised of design and construction professionals and related staff who facilitate and manage building construction and renovation projects on campus. Project Managers frequently perform site visits to oversee and ensure work progress, which could result in their coming in contact with ACM before abatement work occurs or during abatement. Project Managers must notify PSEHS of any upcoming projects which may disturb ACM.

## **C. Outside Contractors**

Many departments may facilitate work that is performed by outside contracted employees. All departments, including those identified in this management plan, are responsible for notifying PSEHS prior to contracting outside work that may disturb ACM. All outside contracted employees shall be notified, in writing, of the presence and location of asbestos containing materials in the area where the work is to be accomplished, or of the absence of ACM and a “clear to work” designation. Lafayette College representatives shall require the outside contractor's signature on the Asbestos Notification Form (Appendix A) when providing asbestos documents to outside companies.

Lafayette College departments may obtain information about asbestos containing materials in their buildings by contacting the Public Safety's Environmental, Health & Safety Division.

## **9.0 Building Inspection and Surveillance of ACM on Campus**

### **A. Existing Buildings**

Surveys identifying the location, quantities and types of ACM in existing campus facilities (academic, residential/housing and athletic) and off-campus housing facilities were performed by SSM Group, Inc. between December 2010 and August 2011 and reports were submitted for each group of buildings. Each survey report (one for each campus building that was inspected) includes a list of homogenous materials, assessment of condition and hazard potential of ACM, approximate square or linear footage, and associated bulk sample lab reports.

Copies of building inspection reports have been provided to the following campus departments:

Public Safety's Environmental, Health & Safety Division  
Plant Operations  
Facilities Planning & Construction

It is recommended that campus buildings be subject to re-inspection every five (5) years by an accredited building inspector; the management plan should also be updated accordingly. This is important because of potential changes in condition and/or quantity of ACM due to various environmental factors, disturbances, or removal of ACM during renovations, etc.

### **B. New Construction**

It is recommended that new construction and renovation/remodeling projects include language in the design specifications that prohibit the installation of ACM in new building materials; and/or a letter from the project architect/lead designer that states no Asbestos Containing Building Materials were specified or installed during construction. This is important since asbestos is still used in the manufacturing of certain building materials such as floor tiles, roofing materials/felts, adhesives, etc.

# Lafayette College Asbestos Management Plan

## Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

### **C. Suspect Materials not Previously Sampled**

In the instance where a suspect material is identified and no previous sampling information is available, the Asbestos Coordinator shall be notified immediately. The sample can be assumed to contain asbestos and removed, or handled, accordingly; or a bulk sample can be collected by a licensed PA Asbestos Building Inspector. The sample shall be submitted to an accredited laboratory for analysis by Polarized Light Microscopy (PLM) for asbestos content. Only laboratories accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) and the American Industrial Hygiene Association (AIHA); and licensed/approved for work in the State of Pennsylvania shall be used for sample analysis.

### **10.0 Work Practices**

General work practices are established for asbestos abatement projects to be performed by contracted Licensed Asbestos Abatement Firms. Contractors shall comply with all federal, state and local regulations pertaining to asbestos-containing materials, including but not limited to the procedures set forth below.

The following actions shall be taken before any planned building maintenance activities, construction and/or renovation activities occur:

1. The Plant Operations Supervisor or Facilities Planning & Construction Project Manager shall review the Asbestos Building Inspection Report and Inventory to verify the presence or absence of ACM. In the event that the subject area is not listed in the Asbestos Inventory Report, sampling of the suspect material should be completed in accordance with Sections 5.0 and 9.0, C of this document.
2. If the building area/room is indicated as not having any ACM, work may proceed.
3. If the building area is indicated as having ACM and it will be impacted by the project, abatement of ACM shall be coordinated through PSEHS. For maintenance projects, Plant Operations will manage the abatement work. Renovation/ demolition project abatements will be managed by the appropriate Facilities Construction & Planning Project Manager.
4. The Abatement Contractor, at a minimum, shall comply with the following work practices, as applicable, based on the type and quantity of ACM being removed, and the method of removal:
  - a. Follow the most current procedures as set forth by OSHA for Class I and II Work including but not limited to use of wet methods, flame resistant polyethylene film six (6.0) mil in thickness, glove bagging, erecting critical barriers, modification/isolation of building ventilation system to that area, air filtration devices (AFDs), providing for a minimum of four (4) air exchanges per hour, maintaining a negative pressure differential of at least, or in excess of, 0.02 inches of water.
  - b. Coordinate activity with PSEHS.
  - c. When applicable, the Abatement Contractor shall provide required notification to regulatory agency of jurisdiction prior to performing the work, where applicable.

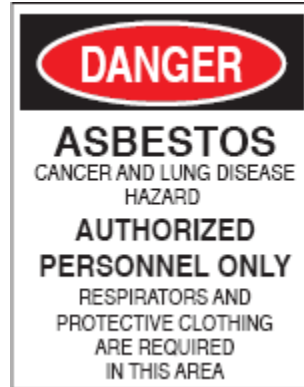
# Lafayette College Asbestos Management Plan

Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

- d. Provide a qualified “competent person” as defined by OSHA to supervise the work.
- e. Establish a regulated area where airborne asbestos is likely to exceed the PEL and post warning signs bearing the following information:



- f. Wear appropriate disposable personal protective clothing that may include coveralls or similar whole-body clothing, head coverings, gloves and foot coverings, and adhere to decontamination procedures set forth by OSHA.
  - g. Wear respiratory protection in compliance with applicable regulations, unless a negative exposure assessment has been performed or air monitoring has demonstrated the permissible exposure limit for asbestos has not been exceeded.
  - h. Perform personal air monitoring for employees working in a regulated area.
  - i. Contact PSEHS regarding the requirements for clearance sampling before returning the room/area for re-occupancy (job specific – see Item 6).
  - j. Report any other damaged ACM in the area immediately to PSEHS.
5. If the building area is indicated as having ACM and the work activity involves only general custodial activities (housekeeping, cleaning, etc.) by Lafayette College or contracted staff, the employees shall:
- a. Exercise care when cleaning, buffing, stripping, floor tiles that are known to be ACM, and when working around other materials known to be ACM (i.e. pipe insulation, etc.).
  - b. Do not sand or physically abrade ACM Floor tile.
  - c. When buffing floors that have been sealed or coated with multiple layers of wax, use wet methods and low abrasion pads; if buffing floors that have not been sealed or coated with multiple layers of wax, use wet methods and low abrasion pads at speeds less than three-hundred (300) RPM's. Periodic sampling can be conducted during this activity, to provide documentation that this activity does not result in employee exposure.
-

# Lafayette College Asbestos Management Plan

Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

- d. Report any damaged ACM in the area immediately to EHS.

## 11.0 Disposal of Asbestos Waste

All asbestos-containing waste material is to be wetted and placed in polyethylene bags (double-bagged) at least six (6.0) mil in thickness bearing the following information/labels.

First Label: In accordance with 29 CFR 1910.1200 (f) of OSHA's Hazard Communication Standard:



**BREATHING AIRBORNE ASBESTOS, TREMOLITE,  
ANTHOPHYLLITE, OR ACTINOLITE FIBERS IS  
HAZARDOUS TO YOUR HEALTH**

Second Label: Provide in accordance with the U.S. Department of Transportation regulation on hazardous waste marking, 49 CFR parts 172 and 172, Hazardous Substances: Final Rule. Published November 21, 1986 and revised February 17, 1987:

**RQ (ASBESTOS)**



**NA 2212  
P.G. III**

Asbestos Abatement Contractor shall be responsible for appropriate and compliant transportation of ACM off of the College Campus and for the proper disposal of the ACM. Waste manifests shall be provided to the proper College department Project Manager and copies to EHS for recordkeeping.

## 12.0 Employee Notification

Employees will be notified whenever applicable and prior to any work with asbestos containing material in their immediate or adjacent area.

## 13.0 Labeling

Signage identifying the presence and location of asbestos containing materials shall be posted at the entrance to mechanical rooms or areas that contain thermal system insulation and surfacing asbestos-containing materials.

---

# Lafayette College Asbestos Management Plan

Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

## **14.0 Medical Surveillance**

Not Applicable; unless Lafayette College employees become certified to remove asbestos and/or employees are issued respiratory protection, which would then be covered under the College's Respiratory Protection Program.

## **15.0 Respiratory Protection**

Not applicable; unless Lafayette College employees become certified to remove asbestos and/or employees are issued respiratory protection. At that point, those individuals would be required to be covered under the College's Respiratory Protection Program. Initially before assignment, and annually thereafter, workers would be required to undergo and pass a physical examination, pass a qualitative or quantitative respirator fit test, and receive required training.

## **16.0 Training**

Not applicable, unless Lafayette College employees become certified to remove asbestos and/or employees are issued respiratory protection. See above.

Class IV Asbestos Work – as applicable, Plant Operations staff employees complete an annual 2-hour asbestos awareness training course.

## **17.0 Contractor Awareness**

Contractors employed by the College shall be informed in writing by the Lafayette College Representative for each specific project of the location of suspect and known ACM in the area they are to perform work. Lafayette College representatives shall facilitate the outside contractor's signature on the Asbestos Notification Form when providing asbestos documents to outside companies. An example of the Asbestos Notification Form is provided in Appendix A.

Other than Licensed Asbestos Abatement Contractors, no outside contractors shall disturb any suspect or known ACM. If suspect ACM is noted in the area of work, and was not identified in the asbestos documentation, contractor shall immediately notify EHS for the proper follow-up.

## **18.0 Emergency Response Procedures**

Any campus building containing ACM is potentially subject to a fiber release episode. Employees are to adhere to the following protocol when reporting a potential fiber release in an area known to contain ACM.

1. Leave and secure the area in such a manner that prevents entry by unauthorized personnel. Post a notice or other sign that would warn unsuspecting persons who might enter the area where the ACM has been released.
2. Notify an immediate supervisor of the incident.
3. If in the area of fiber release, seek medical attention (be sure to fill out an accident/incident report).
4. Contact Public Safety by dialing 610-330-4444 from any campus phone. The Dispatcher will in turn contact the Assistant Director of Public Safety and the Asbestos Coordinator.



# Lafayette College Asbestos Management Plan

Public Safety Department – Environmental, Health and Safety (EHS) Division

Standard Operating Procedure (SOP) #36 – Revised March 2012

---

5. The Asbestos Coordinator will ensure area(s) have been properly secured, and facilitate a response by an outside licensed abatement contractor (on retainer) as soon as possible, in order to abate the damaged material and decontaminate the area.
6. An After Action Review (AAR) by the Asbestos Coordinator will be held, as appropriate, to evaluate the response with affected College Departments.

## **19.0 Recordkeeping**

All documentation and records pertaining to elements identified in this Asbestos Management Plan are maintained by the Asbestos Coordinator in Marquis Hall Room 11 and include:

- Written Operations and Maintenance Plan
- Survey Report with ACM locations
- Notifications and labels
- Training Programs (2-hour asbestos awareness) and records of employee participation.
- Project documentation relating to any abatement projects, such as contract paperwork, daily logs and pertinent communications.
- Any permits, notifications and information pertaining to asbestos abatement performed, including emergency response.
- Abatement and Clearance Testing records and reports.
- Asbestos waste disposal records (manifests).

**This plan covers any buildings that contain, or may contain ACM, and shall continue to be administered until there is documentation that all ACM has been removed. This plan will be reviewed periodically and updated as needed by the Asbestos Coordinator.**