

EHS Scope of Services for Asbestos, Lead, & Other Construction Hazards

Introduction:

This packet is to provide an understanding for the role of EHS in the event that any potential asbestos, lead, or other construction hazards may become an issue during maintenance, demolition, or renovation projects.

The role of EHS is to provide quality assurance and quality control for campus projects from the pre-planning phases through to project completion. Attached are two flowcharts outlining suggested methods for project or construction managers to utilize in order to have a better understanding of the process.

It is best to contact EHS in the pre-planning phase to inquire about any potential asbestos, lead, or other construction hazards by submitting a request on our website, ehs.uci.edu or for unexpected possible disturbances:

**949-824-6200
safety@uci.edu**

Services:

While EHS cannot provide services for every project, EHS should be contacted first for asbestos/lead questions, sampling, abatement coverage, and general consulting purposes. It is required that EHS be able to recharge for time and services. From there, EHS will determine if it is best to perform the necessary tasks for the project or recommend using an outside contractor/consultant for the work.

For example, if a project requires basic sampling of materials prior to a lab renovation where just floors, walls, ceilings, and counters and fume hoods may be impacted, it might be best to use EHS. For sampling like entire roofs, a contractor/consultant.

Contact EHS to determine historical if data exists. Even if you have a prior report for an area, check with EH&S to determine if the conditions have remained static or have changed.

Attached:

Pre-Planning Flowchart

Abatement Planning Flowchart

Abatement Process Flowchart

Workplan Elements

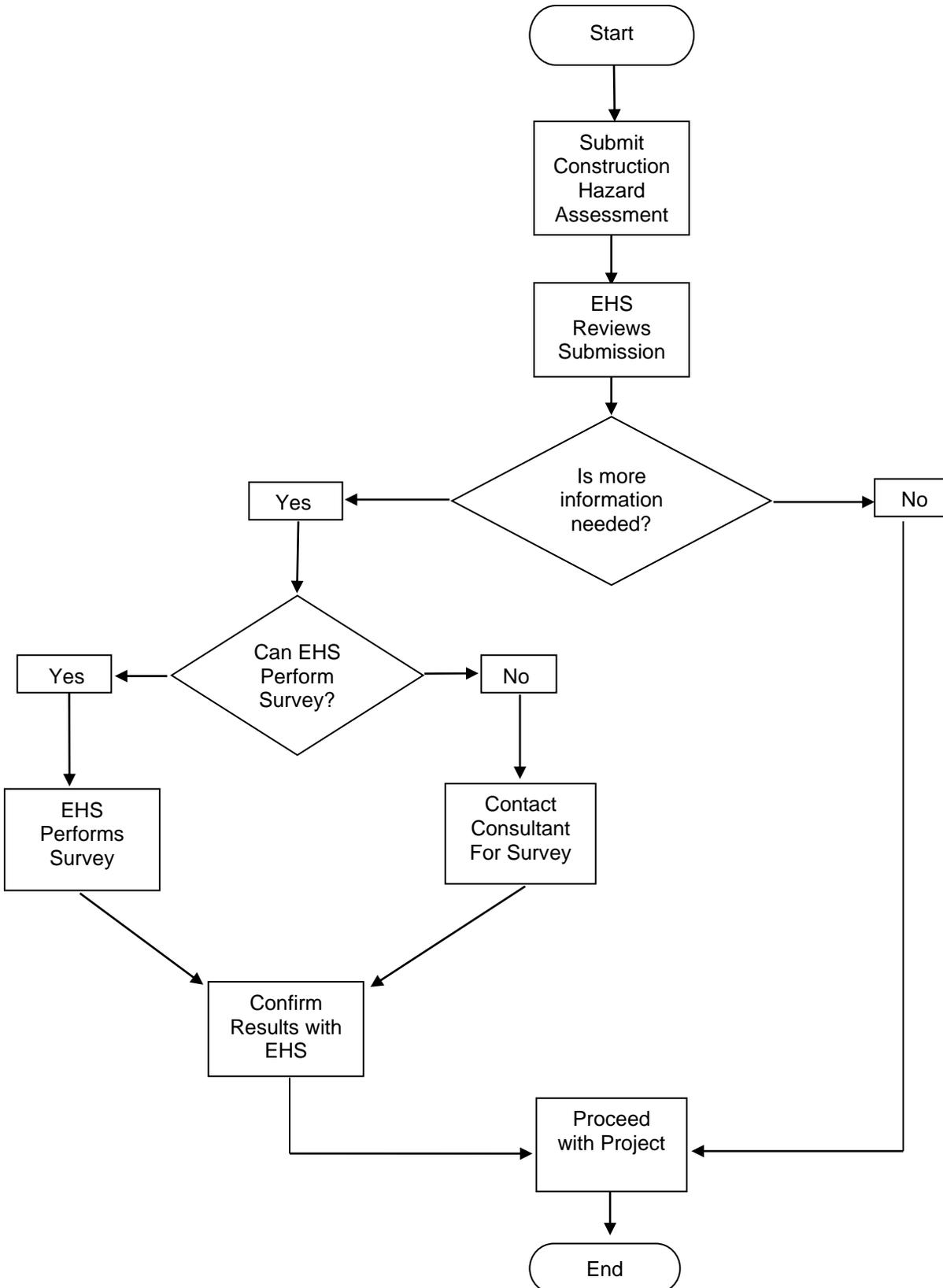
Frequently Asked Questions for Project Managers, Building Managers, & MSOs

Standard Frequently Asked Questions

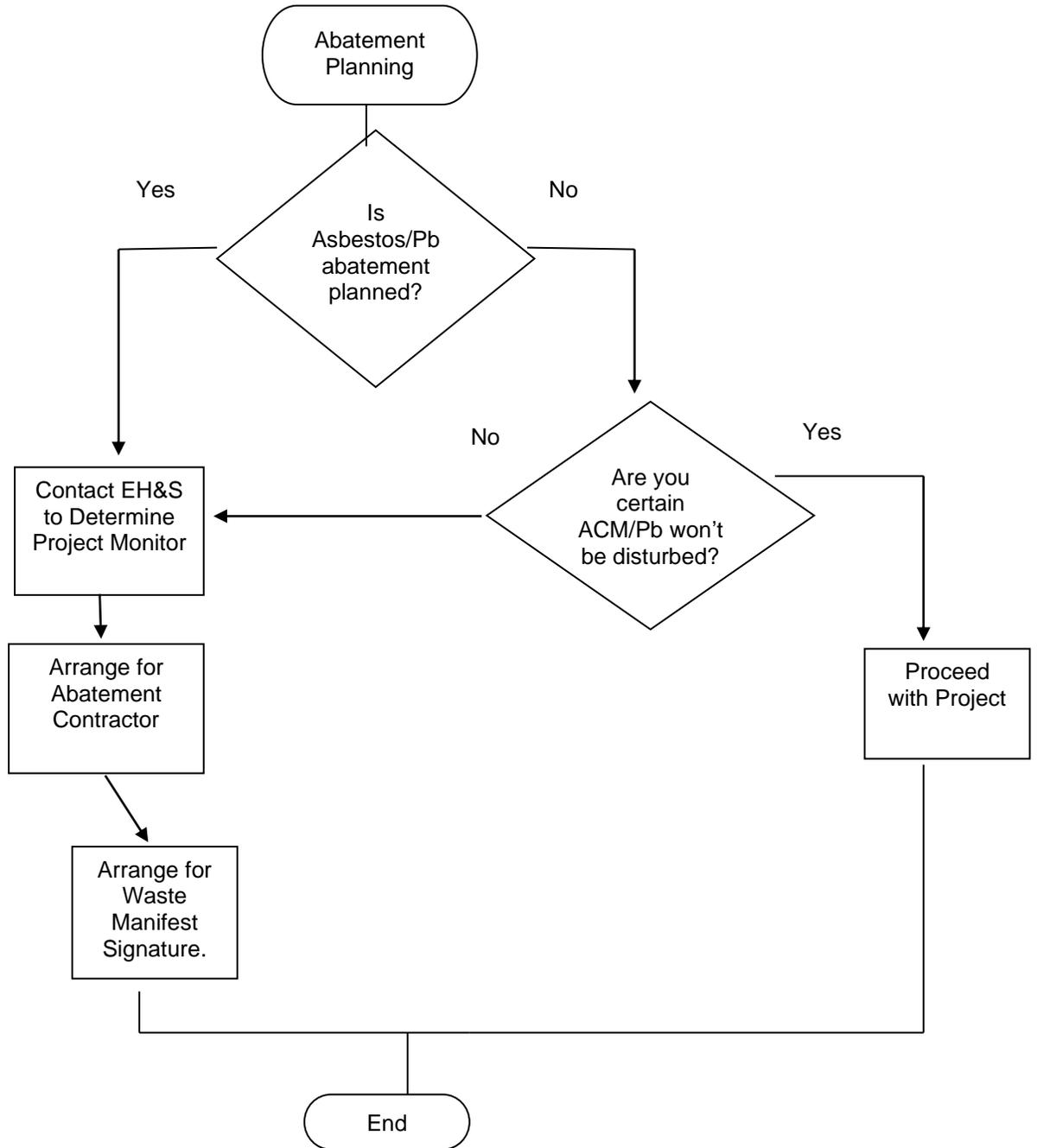
Roles and Responsibilities

Performance Expectations for Consultants and Abatement Contractors

Asbestos and Lead Decision Flow Chart **PRE-PLANNING**

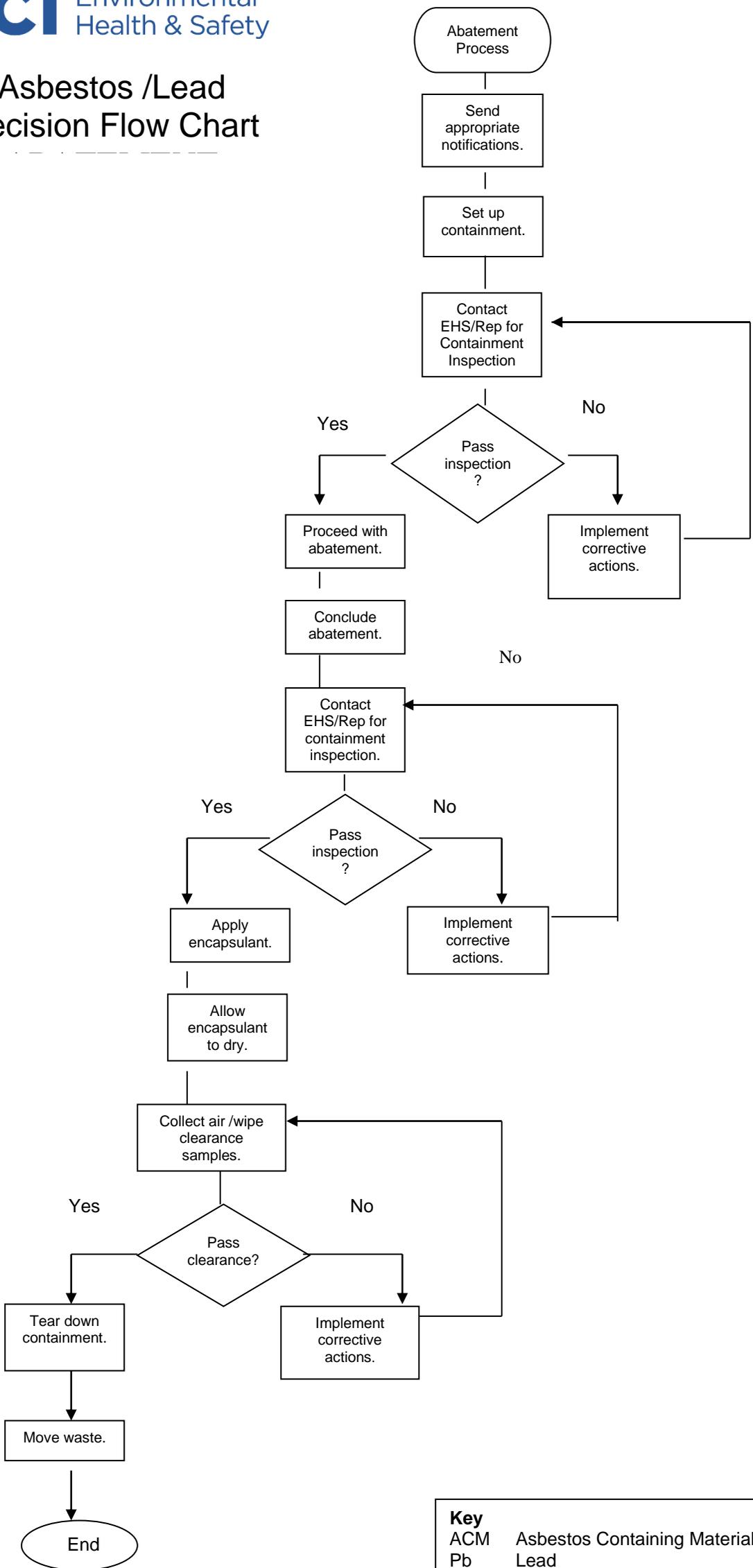


Asbestos & Lead Decision Flow Chart **ABATEMENT PLANNING**



Key	
ACM	Asbestos Containing Material
Pb	Lead
LPB	Lead Based Paint
EHS	Environmental Health & Safety Office
IAQ	Indoor Air Quality

Asbestos /Lead Decision Flow Chart



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ACM	Asbestos Containing Material
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EHS	Environmental Health & Safety Office
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Workplan Elements

- I. Introduction
 - a. Contractor Information
 - b. Project Information/Scope of Work/Timeline
- II. Emergency Procedures and Contact Information
- III. Pertinent Regulations
 - a. Required Notifications to Regulatory Agencies
- IV. Sequence of Work
 - a. Details to include specs on material and equipment to be used, construction of containment, signage, work area preparation, specific procedures, bag out process, etc.
- V. Personal Samples
 - a. UCI EHS reserves the right to request contractor personnel personal sample data from the contractor
 - b. Personal Sampling Plan
- VI. Contingency Plan
- VII. Work Crew Qualifications
- VIII. Waste Disposal
 - a. Manifest
 - b. Transporter Information
 - c. Disposal Site (TSDF)
- IX. Protocol for Workplan Modification

Frequently Asked Asbestos Questions for PMs, BMs, & MSOs

1. Who is South Coast Air Quality Management District (SCAQMD)?

They are the governing body for Asbestos Emissions from Demolition/Renovation Activities.

2. Wasn't asbestos banned?

Yes, however portions of the ban were overturned. Asbestos is still in use/imported from some countries.

3. Which buildings require asbestos testing prior to renovation/demolition?

All of Them. Rule 1403 (d)(1)(A) requires an asbestos survey, regardless of the structure age, prior to renovation/demolition to determine the presence or absence of asbestos.

4. Can anybody remove asbestos from a building if there is less than 100 square feet of asbestos present?

No. Only licensed and registered asbestos removal contractors are able to remove asbestos-containing materials (ACMs) regardless of square footage.

5. Who needs to file/fill out the required Asbestos Notification form(s)?

The Asbestos Abatement Contractor(s) that will remove asbestos and/or demolish the structure.

6. Are there Notification requirements to SCAQMD?

Yes. Notifications are due 10 workdays (14 calendar days) BEFORE work starts.

7. When can I expect an SCAQMD inspector at my site; before, during, or after abatement/demolition?

Anytime. An inspector may visit your site any time before, during and/or after renovation/demolition/completion.

8. Do I have to remove all asbestos before I can demolish a building?

Yes. All asbestos-containing materials are required to be removed prior to demolition.

9. Don't we already have an asbestos survey for this building?

No. EHS does not have a complete/comprehensive survey for any building on campus.

10. Why do I need a survey?

SCAQMD Rule 1403 requires that affected facility or facility component(s) be thoroughly surveyed for the presence of asbestos by a Certified Asbestos Consultant prior to any demolition or renovation activity.

11. Why do I need a site specific survey?

Site specific surveys are required for each project. Surveys address materials that are to be disturbed by the renovation/demolition. When a survey request is received, if available, historical data/surveys are referenced and, if needed, additional sampling may be conducted.

12. Can I just assume that the materials are asbestos?

Yes, but the exemption for assuming that a material is asbestos can only be exercised by a Certified Asbestos Consultant.

13. Why don't you have keys for access?

EHS does not have keys for access. The Project Manager is responsible for providing access.

14. Who hires the Asbestos Abatement Contractor?

The Project Manager is responsible for hiring the Asbestos Abatement Contractor.

15. Who signs the asbestos waste manifest?

The UCI Environmental/Hazardous Waste Group are the only person(s) who are authorized to sign a waste manifest at UCI. For assistance, reference UCI Construction Related Hazardous Waste document.

16. How is underground asbestos cementitious pipe handled?

Contact UCI EHS at 949-824-6200 for an assessment.

Standard Frequently Asked Asbestos Questions

1. What is asbestos?

Asbestos is a mineral fiber found in rocks. There are several kinds of asbestos fibers, all of which are fire resistant and not easily destroyed or degraded by natural processes.

2. Where is asbestos used?

Asbestos has been used in a wide variety of household and building materials, such as pipe and boiler insulation, floor tile and mastic, wall and ceiling materials such as decorative and acoustical plasters or tiles, and exterior siding and roofing materials. Asbestos was used in a product for one or more of the following reasons: (1) to strengthen the product; (2) for thermal insulation; (3) for acoustical or thermal insulation on surfaces; and (4) for fire protection.

3. How can you tell if there is asbestos in a material?

The manufacturer, product literature or product labeling may identify the asbestos content. People with experience working with or evaluating asbestos-containing materials may be able to identify an asbestos-containing material by visual inspection. However, the definitive way to determine the asbestos content of a material is to have a qualified inspector sample the material and have it analyzed by microscopy in a laboratory qualified to perform asbestos analysis.

4. Is asbestos dangerous?

Asbestos has been shown to cause cancer of the lung and lining of the lung (mesothelioma), as well as other non-cancerous lung diseases. Some asbestos materials can break into small fibers, which can get into the air and be breathed in. Once inhaled, fibers can become lodged in lung tissue for a long time. After many years (15-40) asbestos-related diseases can develop.

5. Are all asbestos-containing materials a health risk?

No. A health risk only exists when asbestos fibers are released from a product or material and are present in the air for people to breathe. Soft, easily crumbled materials have the greatest potential for fiber release and therefore the greatest potential to create health risks.

6. Do all people exposed to asbestos develop asbestos-related disease?

No. Most people exposed to small amounts of asbestos do not develop any health-related problems. Health studies of asbestos workers show however, that the greater the exposure to asbestos, the greater the risk of developing asbestos-related disease.

7. How can exposure to asbestos be prevented?

Asbestos exposure can be prevented by maintaining materials in intact and sealed condition. When asbestos must be disturbed, as in renovation and repair operations, a combination of engineering controls (containment and ventilation) and dust suppression methods (wetting and other work practices) can prevent exposure to building occupants and minimize exposure to abatement workers.

8. Is asbestos still being installed in buildings at UC Irvine?

Asbestos-containing materials are no longer installed in UC Irvine buildings. In addition, many of these building materials are no longer manufactured or distributed in the United States (e.g., fireproofing, thermal insulations, sheet flooring and floor tile, etc.).

9. Should all asbestos be removed from a building?

No. Regulations require that asbestos-containing materials be maintained in intact and sealed condition. Scientists say that managing asbestos in-place is a prudent approach to minimizing hazards posed by asbestos. However, any disturbance of asbestos requires trained and certified personnel, as well as the mandatory use of engineering controls and work practices to prevent or minimize exposure to asbestos.

10. Can anyone work with asbestos?

No. People who work with asbestos must be trained and certified in proper asbestos abatement work practices. Asbestos workers must participate in a medical surveillance program and must be qualified and approved to use respiratory protection. Contractors must be licensed to perform asbestos abatement. In addition, all consultants who perform inspection and sampling, design abatement projects and monitor the performance of abatement must be specially trained and certified to perform this work.

11. How do you know that you are not exposed to asbestos during an abatement activity in your building?

UCI hires licensed, qualified contractors to perform abatement work on campus. UCI also hires certified independent consultants to oversee the work of the abatement contractor to ensure that all controls are adequately implemented. These consultants perform inspection and sampling on a regular basis throughout the duration of abatement activities and report results to building management and occupants.

12. If you encounter asbestos in the workplace, what should you do?

Do not disturb the material in any way. Avoid cleaning or maintenance activities that may disturb the material. Notify your supervisor immediately. If it is necessary to clean or disturb the material, specially trained and licensed contractors should be utilized.

13. Where can you get advice, assistance or further information regarding asbestos?

Fully trained and certified health professionals are available at Environmental Health and Safety to advise and assist you at 949-824-6200

Roles and Responsibilities

Project Manager (PM):

- Provides Written Project Scope of Work, Schedule, and Diagrams
- Provides building/room access/escort.
- Building/Occupant Notification and on-going management.
- Coordinates Pre-Construction meeting.
- Coordinates Job Walk(s).
- First Point of Contact and Conflict Resolution for Project Duration.
- Hires abatement contractor; Can utilize Job Order Contract (JOC) approved vendor.
- Hires the Environmental Consultant (EC).
- Coordinates utility access for abatement contractor.
- Fire Alarm Devices – Coordinates with EHS Fire Safety to disable prior to abatement.
- Provides Project Contact List.
- Coordinates Hazardous Waste Disposal with the EHS Environmental/Hazardous Waste Program Division.
- At the completion of work, removes the Building Occupant Notification.

EHS Industrial Hygienist (EHS IH):

- Participates in *Initial* Job Walk and/or pre-planning meetings; or other meetings as requested by PM.
- Reviews Scope of Work with the EC to clearly understand objectives.
- Assists in transition from EHS to EC vendor.
- Reviews Work Plan to ensure regulatory compliance and provides comments in conjunction with the EC.
- Available for the consultation with issues arising between PM, EC, and others.

Environmental Consultant (EC; if used):

- Participates in Initial Job Walk.
- Reviews Work Plan and provides comments in conjunction with EHS IH.
- Provides Weekly Log to EHS IH.
- Attends project meetings.
- Provides oversight for the duration of asbestos abatement work.
- Consults as-needed with EHS as issues arise.

Performance Expectations for Consultants & Abatement Contractors

1. Communication

- Consultant and abatement contractor will notify EHS staff via group text message of arrival on site each day prior to that day's activities.
- Noteworthy issues are to be reported immediately to that group text, these include (but are not limited to):
 - i. Regulatory agency visits
 - ii. Consultant or abatement contractor absence
 - iii. Project change orders
 - iv. Schedule changes
 - v. Containment setup or teardown issues
- Monthly JOC meetings are to be attended. Reasons are to be provided via email for not attending.

2. Behavior

- **Onsite consultant represents University EHS Office**
- Keep relationship and language professional and business-like.
- Be mindful of building occupants (including staff, students & professors).
- **Be discrete and give basic answers when asked questions by building occupants. Refer questions you're not comfortable with the EHS.**
- Be on time to all project-related activities. (If something comes up, make EHS aware.)
- Be honest with EHS staff. Don't make something up to cover an obvious error or wrongdoing.

3. Weekly Logs (Consultants Only)

- Submit weekly logs to EHS every Friday. If a project runs over the weekend, submit them the first Friday following that weekend activity.
- Weekly log information will include:
 - i. Details of work performed (i.e. encapsulation, teardown, etc.)
 - ii. Number of samples collected and results
 - iii. Shift Hours
 - iv. Hours Billed
 - v. Dedicated Man Power
 - vi. Schedule Changes
 - vii. Number of workers, their current licenses with expirations dates, as well as their medical clearance for a respirator and fit test records

4. Dress-Code/Personal Protective Equipment (PPE)

- Company shirt/uniform must be worn
- Personal Protective Equipment (PPE) includes but it is not limited to:
 - i. Hard Hat
 - ii. Safety Vest
 - iii. Safety Glasses
 - iv. Boots
 - v. Gloves
 - vi. Respirator and Cartridges

Performance Expectations for Consultants & Abatement Contractors

vii. Coveralls/Tyvek

5. Absenteeism/Tardiness

- Be on time to all project-related activities
- Notify EHS if a late arrival is anticipated
- If leaving the jobsite before the scheduled, notify EHS

6. Parking

- Allow adequate time for parking
- Parking permits are required for all UCI properties

For Consultants

Your final reports of activities for either an abatement or bulk sampling survey is required to follow all local state and federal regulations. There should be absolutely no fabrication of ANY information within them.