


WFUHS ENVIRONMENTAL HEALTH & SAFETY			
<i>Title:</i>		<b>ASBESTOS MANAGEMENT PLAN</b>	
<i>Approved by:</i>		<i>Effective Date:</i>	August 24, 2007
David A. Brown, Director, EH&S		<i>Revised Date:</i>	February, 2009
		<i>Section:</i>	CHEM

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## **INTRODUCTION**

### **PURPOSE**

The purpose of this Asbestos Management Plan (AMP) is to describe a program for recognizing, controlling and mitigating potential asbestos hazards at all WFUHS campuses.

### **BACKGROUND INFORMATION**

Federal requirements for asbestos specify work practices for the removal of ACM from buildings and require the identification of asbestos in public and private, primary and secondary schools (40 CFR Part 763 Asbestos Hazard Emergency Response Act, 40 CFR Part 61 Subpart M NESHAP for Asbestos). The Occupational Safety and Health Act (29 CFR 1910.1001 and 1926.1101) provides guidance for workers potentially exposed to asbestos in the workplace.

The North Carolina Administrative Code and General Statutes establish notification requirements, procedures for emission control and waste disposal related to handling, transporting, storing and disposing of asbestos-containing material or waste.

Generally, the types of asbestos that remain in WFUHS buildings include thermal system insulation, smaller amounts of vinyl-asbestos tiles (VAT), floor and baseboard mastics, surfacing materials or ceiling tiles.

This Asbestos Management Plan (AMP) describes how WFUHS complies with federal, state, and local requirements for asbestos management.

## **DEFINITIONS AND REGULATORY OVERVIEW**

Key definitions and acronyms as well as a summary of asbestos regulations are provided below.

### Definitions

*Abatement:* the removal, repair or encapsulation of ACM or debris/dust contaminated with asbestos.

## ACM: Asbestos Containing Materials

*ACM Classification:* In order to classify ACM, an inspection is performed whereby all areas of material that are suspected to contain asbestos are located and listed. These materials are then treated as ACM unless samples are taken and they are confirmed to be non-asbestos containing materials. The location of the materials suspected of containing asbestos is documented and then categorized using the following categories:

- Surfacing materials – Interior ACM that has been sprayed on, troweled on, or otherwise applied to surfaces (structural members, walls, ceiling, etc.) for acoustical, decorative, fireproofing or other purposes. This includes acoustical plaster, hard plasters (wall or ceiling), fireproofing insulation, spray-applied or blown-in thermal material, joint or patching compound and textured paints or plasters.
- Thermal System Insulation (TSI) – Insulation used to control heat transfer or prevent condensation on pipes and pipe fittings, boilers, breeching, tanks, ducts, and other parts of hot and cold water systems; heating ventilation, air conditioning (HVAC) systems; or other mechanical systems. These insulation materials include pipe lagging, pipe wrap, duct insulation, block insulation, cements and muds (often used on fittings), and a variety of other products such as gaskets and ropes.
- Miscellaneous Materials – Other, mostly nonfriable products and materials found on structural components, structural member or fixtures, such as floor tile, ceiling tile, construction mastic for floor and ceiling materials, sheet flooring, fire doors, asbestos cement pipe and board, wallboard, acoustical wall tile, and vibration damping cloth. “Miscellaneous materials” do not include TSI or surfacing materials.

*Asbestos:* a term that describes six naturally occurring fibrous minerals: chrysotile, amosite, crocidolite, anthophyllite, tremolite, actinolite, and any of these minerals that have been chemically treated and/or altered. Chrysotile, amosite, and crocidolite are the most commonly used types of asbestos in building products.

*Regulated “Asbestos Containing Material” (ACM):* material composed of asbestos of any type and in an amount greater than one percent by weight, either alone or mixed with other fibrous or non-fibrous material.

*Class I, II, III Asbestos Work:* Work activities that will be performed by a trained outside contractor that involve the removal or repair of asbestos-containing thermal system insulation, surfacing materials (e.g. spray-on fireproofing) or other miscellaneous ACM.

*Class IV Asbestos Work:* Work that involves the engineering and custodial activities during which employees or subcontractors may contact but do not disturb ACM or PACM. It may involve cleaning in mechanical rooms or removal of equipment or debris in areas where ACM is or may be present.

*Competent person:* one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, and who has the authority to take prompt corrective measures to eliminate the identified hazards. For Class I, II, or III work, the competent person must also meet special training requirements. All abatement and other construction work conducted in regulated areas must be supervised by a competent person.

*Friable ACM:* material that, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously non-friable material after such

previously nonfriable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

*Nonfriable ACM*: material that, when dry, may not be crumbled, pulverized or reduced to powder by hand pressure.

*Regulated area*: established by the contractor to distinguish areas where Class I, II or III asbestos work is conducted, or otherwise where airborne concentrations of asbestos exceed, or there is a reasonable possibility that they may exceed, the PELs. Only authorized personnel can be present in a "regulated area."

*Permissible Exposure Limits (PELs)*: The limits established by OSHA to protect workers against the health effects of exposure to hazardous substances in the air. For asbestos, the PEL is 0.1 fiber/cc of air, based on an 8-hour time weighted average (TWA). Excursion limit: 1.0 fiber/cc averaged over 30 minutes.

*Presumed Asbestos Containing Material (PACM)*: thermal system insulation (TSI) and surfacing material found in buildings constructed no later than 1980 must be presumed to contain asbestos. The designation of a material as "PACM" may be rebutted pursuant to 29 CFR 1910.1001(j) (8). For remediation work, TSI and sprayed or troweled on surfacing materials must be treated as asbestos-containing, unless a determination is made in compliance with 29 CFR 1926.1101(k)(5) that the material is not asbestos-containing. Asphalt and vinyl flooring material installed prior to 1980 must also be considered as asbestos containing during remediation work unless the employer, pursuant to 29 CFR 1926.1101 (g)(8)(i)(I), determines that it is not asbestos-containing.

## REGULATORY SUMMARY

The following regulations or policies pertain to the management and/or removal of ACM and PACM.

Federal Regulation	Title/Description
29 CFR 1910.1001	General Industry. Asbestos
29 CFR 1926.1101	Construction. Asbestos
40 CFR 61.140	Asbestos NESHAP
40 CFR Subpart E, Appendix C	Asbestos Model Accreditation Plan
40 CFR Subpart M—National Emission Standard for Asbestos Sec. 61.145	Standard for Demolition and Renovation
49 CFR parts 171 and 172.	Regulate the transportation of asbestos-containing waste material. Requires waste containment and shipping papers.

The Asbestos Hazard Management Program is established under [N.C. General Statute §130A-444-452](#) - Asbestos Hazard Management. Administrative penalty provisions may be found under [N.C. General Statute §130A-22\(b1\) and \(b2\)](#).

Rules adopted by the North Carolina Health Commission to implement the statutes may be found under [10A NCAC 41C.0600 - Asbestos Hazard Management Program](#).

The AHMP Rules adopt the National Emission Standards for Hazardous Air Pollutants (NESHAP) relating to asbestos demolition and renovation by reference. These regulations may be found at [40 CFR 61, Subpart M - National Emission Standard for Asbestos \(40 CFR 61-141-157\)](#).

[Forsyth County Code--Chap 3 "Air Quality Control"](#) (Sections 3D .1110 and 3Q .0101) are applicable.

## RESPONSIBILITIES

### WFUHS Environmental Health & Safety

- Appoint an EH&S Asbestos Program Coordinator who will oversee Wake Forest University Health Sciences' Asbestos Management Program.
  - The EH&S Asbestos Program Coordinator will receive AHERA Asbestos Building Inspector training from the State of North Carolina Health Hazards Control Unit NC DHHS/Division of Public Health. Training and certification will be current.
- Review of renovation and demolition projects to ensure compliance with applicable local, state and federal asbestos laws and regulations.
- Conduct and/or supervise asbestos building inspections.
- Development and implementation of asbestos awareness training program.
- Maintenance of the following records:
  - Survey
  - Training
  - Respirator fit testing
  - Abatement and disposal records
  - Review of Contractor Qualifications ([APPENDIX D](#)), annually
  - Contractors' asbestos training, annually

### Facilities Planning

- Receive asbestos awareness training from EH&S.
- Inform contractors and staff of asbestos (ACM and/or PACM) containing materials in project work areas.

### WFUHS Engineering

- Appoint an Asbestos Abatement Supervisor.
  - The Asbestos Abatement Supervisor will receive appropriate training provided by Health Hazards Control Unit NC DHHS/Division of Public Health. Certifications must be current.
- Contract for asbestos removal when necessary in accordance with federal, state, county laws and regulations, and the requirements of this policy.
- Supervision and coordination of asbestos abatement activities at WFUHS by outside contractors.
- Inform staff/contractors of asbestos containing materials in project work areas.
- Receive asbestos awareness training.
- Follow the reporting duties outlined in the asbestos release action plan.
- Maintain records of asbestos removals in accordance with this policy.

### WFUBMC Environmental Services

- Receive asbestos awareness training from EH&S.
- Follow the reporting duties outlined in the [Asbestos Release Action Plan](#).
- Follow all rules and procedures for operations, repairs, and maintenance activities involving ACM.

### WFUBMC Information Services

- Receive asbestos awareness training from EH&S.
- Follow the reporting duties outlined in the asbestos release action plan.
- Follow all rules and procedures for operations, repairs, and maintenance activities involving ACM.

## **WFUBMC Risk & Insurance Management**

- Provide EH&S with verification ([APPENDIX D](#)) that contractor's insurance and bonding ability is acceptable, when necessary.

## **Licensed Asbestos Abatement Contractors**

- Must, at minimum, comply with the standards and procedures required by local, state and Federal regulations and listed in this Asbestos Management Plan.
- Obtain necessary permits and oversee activities that may involve the abatement/disturbance of asbestos-containing materials (e.g., Class I, II, III and IV Asbestos Work).
- Present evidence of asbestos training and the fulfillment of other asbestos regulatory requirements to the WFUHS EH&S Asbestos Coordinator prior to initiating work on asbestos materials.

## **ACM HAZARD SURVEY AND INSPECTIONS**

Asbestos-containing materials have been used in buildings since approximately 1920, therefore, it is likely that asbestos-containing material may have been or is present in campus buildings. Suspect asbestos-containing materials (thermal system insulation and surfacing material found in buildings constructed no later than 1980) shall be considered "presumed asbestos-containing material" (PACM) until three bulk samples of the material have been analyzed by an accredited laboratory and shown to contain less than 1% asbestos.

Wake Forest University Health Sciences completed an asbestos survey and inspection of campus in 1993. ([APPENDIX A](#))

- [APPENDIX A](#) includes a list of campus buildings and whether the buildings contain friable and/or non-friable ACM or PACM.
- The building survey will be used to identify the impact of proposed demolition/renovation projects on identified asbestos-containing material.

As buildings or portions of buildings that contain ACM are renovated or demolished, and the impacted ACM is removed, the inventory will be updated. The following details will be provided:

- Location, type and condition of predominant sources of ACM or PACM;
- Date of inspection and/or sample collection and asbestos content (if applicable); and,
- Description of response actions or preventive measures taken (if applicable).

## **PERIODIC INSPECTIONS**

The possibility of fiber release from ACM is based on the material's condition, physical characteristics (e.g., friability), and location (see below). These factors can be used to evaluate the need for response actions. These factors and recommended actions are based on the criteria provided by the USEPA (USEPA, June 1985). These assessments can be used to prioritize response actions for ACM that may remain at the campus. Wake Forest University Health Sciences shall periodically inspect the condition of ACM on campus using the form in [APPENDIX C](#).

Current Condition of ACM

- Evidence of deterioration or delamination from the underlying surface (e.g., hanging material)
- Evidence of physical damage (e.g., dust/debris present)
- Evidence of water damage

## Potential for Future Damage or Disturbance of ACM

- Proximity to air plenum or direct air stream (e.g. above a dropped ceiling with open plenum)
- Accessibility, visibility (to occupants and engineering staff) and degree of activity (vibration, movement of occupants)
- Change in area or building use

## **LABELING REQUIREMENTS**

### SIGNS AND LABELS

#### Warning Sign Requirements – for Regulated Areas

The Licensed Asbestos Abatement Contractor shall post warning signs in areas where asbestos abatement is being carried out in accordance with requirements outlined in 29 CFR 1910.1101, and applicable state regulations.

WFUHS's Licensed Asbestos Abatement Contractors will provide and display warning signs at each regulated area and at all approaches to regulated areas. Warning signs will read as follows:

**DANGER  
ASBESTOS  
CANCER AND LUNG DISEASE HAZARD  
AUTHORIZED PERSONNEL ONLY**

In addition, where the use of respirators and protective clothing is required in the regulated area the warning sign shall include the following language:

**RESPIRATORS AND PROTECTIVE CLOTHING  
ARE REQUIRED IN THIS AREA**

#### Warning Label Requirements

Labels are required for any scrap, debris, waste and other products containing asbestos fibers (greater than 1%). In addition, wherever previously installed ACM and/or PACM is identified, labels or signs will be affixed or posted in areas where they will clearly be noticed by employees (e.g., entrance to mechanical rooms) so that they will be notified of what materials contain ACM and/or PACM. However, warning labels are NOT required where:

- Asbestos fibers have been modified by a bonding agent, coating, binder, or other material provided that the manufacturer can demonstrate that during any reasonably foreseeable use, handling, storage, disposal, processing, or transportation, no airborne concentrations of fibers of asbestos in excess of the time-weighted average permissible exposure level and/or excursion limit will be released, or
- Asbestos is present in a product in concentrations less than 1.0%.

Where labels are required, signs may be used in lieu of labels as long as they contain the information content required for labeling. The labels must include both the identity of the material and a hazard warning, as required by the OSHA Hazard Communication standard [29 CFR 1910.1200(f)], as well as the following information:

**DANGER  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD**

## **TRAINING REQUIREMENTS**

### *Environmental Health & Safety*

The Asbestos Program Coordinator, appointed by EH&S, will receive AHERA Asbestos Building Inspector training from the State of North Carolina Health Hazards Control Unit NC DHHS/Division of Public Health. Training and certification will be current.

### *WFUHS Engineering*

The Asbestos Abatement Supervisor, appointed by WFUHS Engineering, will receive AHERA Asbestos Abatement Supervisor training from the State of North Carolina Health Hazards Control Unit NC DHHS/Division of Public Health. Training and certification will be current.

WFUHS Engineering, Environmental Services, Information Services, and Facilities Planning may work in areas where ACM or PACM is present. The following is a description of the training program to be implemented by WFUHS or contractors for personnel performing activities that have the potential to result in contact with or disturbance of ACM or PACM.

### *Engineering and Environmental Services*

All maintenance or Environmental Services who perform maintenance or custodial work during which they may contact, but not disturb ACM or PACM (or other employees performing Class IV work) shall be required to attend an annual Asbestos Awareness Training session as required in OSHA 1910 and 1926 requirements and EPA 40 CFR 763.92(a) (1) .

Environmental Health and Safety shall maintain records of employee participation in Asbestos Awareness Training sessions. The Asbestos Awareness Training shall cover the following topics:

- What is asbestos?
- Uses of asbestos
- Identification of asbestos-containing materials
- Health effects from asbestos-containing materials
- Laws regulating asbestos
- Where asbestos can be found at WFUHS
- When is asbestos potentially hazardous
- Discussion of WFUHS Asbestos Management Plan

Contractors conducting asbestos work at WFUHS must, where applicable, provide staff trained in accordance with the requirements of the Asbestos Hazard Emergency Response Act (AHERA), Asbestos School Hazard Abatement Reauthorization Act (ASHARA), National Emission Standards for Hazardous Air Pollutants (NESHAPS), Occupational Safety and Health Administration (OSHA) asbestos rules, Respiratory Protection and any additional requirements of North Carolina regulatory agencies. As appropriate, WFUHS staff will be trained in general accordance with these regulations.

### **CONTRACT MAINTENANCE/HOUSEKEEPING SERVICES**

All contract maintenance/housekeeping services employees who perform maintenance or custodial work during which they may contact, but not disturb ACM or PACM (or other employees performing Class IV work) shall be required to attend an annual Asbestos Awareness Training session as required in OSHA 1910 and 1926 requirements and EPA 40 CFR 763.92(a) (1) .

## **MEDICAL SURVEILLANCE**

### **WFUHS Engineering**

Asbestos Medical Surveillance for WFUHS Engineering staff is necessary.

The OSHA Asbestos Standard for the General Industry and the Construction Industry and the EPA Worker Protection Rule require that employees be involved in a medical surveillance program. Employees who are required to wear a respirator as part of their job must obtain a medical clearance from a physician or other licensed health care professional physician, and must also be included in a respiratory protection program.

### **Licensed Asbestos Abatement Contractors**

Medical records are required to be retained by asbestos abatement contractors. WFUHS may require that contractors provide information verifying that staff has been trained, fit tested and that they participate in a medical surveillance program.

## **OPERATIONS and MAINTENANCE PROCEDURES**

The operations and maintenance procedures that are provided herein are designed to prevent the release of asbestos fibers through management practices. The following procedures will be adjusted to fit the type(s) of ACM in the building.

### **REPAIR AND MAINTAINANCE ACTIVITIES**

The following work practices relating to the maintenance of asbestos-containing flooring materials are required:

Sanding of asbestos-containing floor materials is prohibited. Stripping of finished asbestos-containing flooring shall be conducted using low-abrasion, **white** buffing pads at speed lower than 300 rpm and wet methods. Stripping of unwaxed or unfinished asbestos-containing flooring is prohibited. Burnishing or dry buffing may be performed only on asbestos-containing flooring, which has sufficient finish so that the pad cannot contact the asbestos-containing material. In most cases, at least three layers of wax will provide that margin.

### **Removal of Asbestos-Containing Floor Tile**

Unbroken, loose floor tiles may be wet and placed in properly labeled, double bagged by operations and maintenance trained supervisors, or left in place and removed by the Wake Forest University Health Sciences' Abatement Personnel or outside contractor. Broken, chipped, cracked or crumbling floor tiles shall be considered friable asbestos-containing material and shall be removed using negative containment and wet methods. Handling or disposal of broken floor tiles by anyone other than a NC DEHNR certified Asbestos Hazard Abatement Specialist or worker is prohibited.

### **CONSTRUCTION AND DEMOLITION ACTIVITIES**

Renovation or construction projects must be approved by the EH&S Asbestos Program Coordinator and, as appropriate, be conducted by licensed personnel. WFUHS Asbestos Abatement Supervisor shall review all Facilities Planning and WFUHS demolition and renovation projects to be completed by outside contractors for the potential to disturb suspect asbestos-containing material. The form included in **APPENDIX D** shall be used to record information pertinent to contractor evaluation. A current copy of **APPENDIX D** should be kept by Environmental Health and Safety for current contractors.

Prior to the start of abatement or construction work involving ACM or PACM, WFUHS will notify the following parties of the presence, location and quantity of ACM or PACM in the work area:

- Prospective contractors applying or bidding for work whose employees reasonably can be expected to work in or adjacent to areas containing such material,
- WFUHS employees who will work in or adjacent to areas containing such material,
- Employers of other service contractors performing work within or adjacent to areas containing such materials, and
- Any tenants who will occupy areas containing such material.

A detailed description of the project work scope, including an estimate for the amount in linear or square feet of asbestos-containing material to be abated, location, and type of material, and whether or not a contained work site will be established shall be prepared by an Asbestos Hazard Abatement Project Designer accredited by NC DENR. The form included as **APPENDIX E** shall be used to gather pertinent project information.

Contractors are required by the OSHA standard [29 CFR 1926.1101(k)(3)(iii)] to inform WFUHS within 10 days of the completion of abatement and construction work of the current location and quantity of PACM and/or ACM remaining in the area and final monitoring results, if any.

If contractors discover ACM and/or PACM during work for WFUHS, they are required to inform their WFUHS contact within 24 hours of the discovery of the presence, location and quantity of such newly discovered ACM and/or PACM.

#### WASTE MANAGEMENT

Proper waste handling, storage and disposal will be performed for all ACM. Licensed Asbestos Abatement Contractors are responsible for ensuring that asbestos waste materials are disposed at landfills licensed to accept asbestos-containing waste materials.

### **EMERGENCY RESPONSE PROCEDURES**

#### INCIDENT REPORTING:

- Any incident, accident, or emergency where asbestos fibers may have been released must be immediately reported to EH&S and the WFUHS Engineering Department's Asbestos Abatement Supervisor
- The reporting of an incident will then be conducted, as warranted, in accordance with applicable federal and state requirements.
- Restrict access to the area
- The WFUHS Engineering Department's Asbestos Abatement Supervisor will contract with a Licensed Asbestos Abatement Contractor for clean-up.

The EH&S Asbestos Program Coordinator shall maintain copies of the State of North Carolina and Forsyth County notifications. Information regarding small-scale asbestos removal projects (less than 160 square feet/260 linear feet) shall be maintained by the EH&S Asbestos Program Coordinator and will include the following information:

- Location where asbestos-containing material was removed.
- Amount of friable or non-friable asbestos-containing material removed.
- Name and address of abatement contractor.
- Name and address of disposal facility.

### **RECORD-KEEPING**

Copies of records pertaining to asbestos management activities at WFUHS shall be maintained at WFUHS EH&S Office to document compliance with the requirements of the AMP. These records should be made available to custodial, regulatory or emergency personnel upon request and should be kept for a prescribed period of time.

## TRAINING RECORDS

WFUHS EH&S will serve as in-house contact for training and will maintain copies of training records. The completion of all training by Engineering and Environmental Services and other related WFUHS personnel will be documented and will include:

- The person's name and job title;
- The date that training was completed;
- The location of the training; and,
- The number of hours completed in the training.

## INFORMATION REGARDING ASBESTOS REMOVAL PROJECTS

The form included in [APPENDIX F](#) shall be used to record the receipt of all data from the Asbestos Contractor.

Engineering manages/coordinates, approves, schedules and inspects all asbestos related activities conducted at the campus.

EH&S will maintain survey or abatement related records. Engineering will forward records of asbestos removal to the EH&S department, and EH&S will maintain the copies of the disposal activity records.

EH&S will maintain all waste shipment records for a period of **three** years following the removal of asbestos. The following information will be recorded for each response action or preventative asbestos measure: Put as responsibilities.

A written description of the measure or action, including the method used;

- The location where the measure or action was taken;
- Reasons for selecting the measure or action;
- The start and completion dates of the work;
- The names and addresses of all workers and contractors involved with the work (if applicable);
- The State, accreditation number, and training provider name of all contractors involved with the work (a copy of the certificate); ,
- If ACM is removed, the name and location of the ACM storage or disposal site;
- Documentation of notification to NCDENR;
- Personal and area air monitoring results (e.g., clearance air samples); and
- Final exposure monitoring results (if applicable).

## PROGRAM REVIEW

- The Asbestos Management Program shall be reviewed by the Environmental Health and Safety Department annually.

**APPENDIX A – IDENTIFICATION OF ASBESTOS-CONTAINING AND PRESUMED ASBESTOS CONTAINING MATERIALS**

LOCATION	TYPE	CONDITION
239 Hawthorne Rd. (EH&S)	<ul style="list-style-type: none"> <li>• Main - Black Mastic (floor tile glue)</li> <li>• Basement - Heating water pipe insulation</li> </ul>	Good
1940 Beech St. – PCR Building	Main floor - Vinyl floor covering in bathroom (tan color) Basement - Vinyl floor covering in bathroom (gray color)	Good
2060 Beech St. – ARIC Building	Roof - Roofing insulation	Good
Gray Building - General	<ul style="list-style-type: none"> <li>• 9" x 9" floor tile</li> <li>• Floor glue</li> <li>• 12" x 12" ceiling tile glue</li> <li>• Some domestic hot and cold water line insulation</li> <li>• Some heating water line insulation</li> <li>• Some CHW line insulation</li> <li>• Some steam and condensate piping insulation</li> <li>• 5087 Plaster ceiling material</li> <li>• 4090 Plaster ceiling material</li> <li>• Inner lining of fumehoods</li> <li>• Inner lining of some chemical cabinets below fumehoods.</li> </ul>	Good
Hanes Building Lower Hanes – Basement – 2 <sup>nd</sup> Floor	<ul style="list-style-type: none"> <li>• 9" x 9" floor tile</li> <li>• Some of the cold room ceiling tiles (most have been removed)</li> <li>• Some of the steam and condensate piping insulation</li> <li>• Some of the "mud" elbows and fitting on the CHW pipe insulation</li> <li>• Inner lining of fumehoods</li> <li>• Inner lining of some chemical cabinets below fumehoods.</li> </ul>	Good
Upper Hanes – 3 <sup>rd</sup> – Penthouse Floors	No suspect asbestos-containing materials are known at this time	Good
Meads Hall	No suspect asbestos-containing materials are known at this time	Good
Medical Foundation Apartments	All known ACM was removed from the boiler rooms and laundry in 1995	Good
Piedmont Plaza 1	12" x 12" floor tiles in the stairwell	Good
Piedmont Plaza 2	Black Mastic (floor tile glue)	Good
Watlington Hall	No suspect asbestos-containing materials are known at this time	Good
PTCRC	<ul style="list-style-type: none"> <li>• Masonite exhaust ducts</li> <li>• Old duct tape</li> <li>• Some pipe insulation in inaccessible pipe chases (domestic water, steam and condensate piping)</li> <li>• Inner lining of fumehoods</li> <li>• Inner lining of some chemical cabinets below fumehoods.</li> </ul>	Good

**APPENDIX B - WFUHS ASBESTOS PROJECT INFORMATION FORM**

Job Date:	
Location:	Building:
	Floor:
	Room name, number or description:
Asbestos Information:	Sample Number:
	Analysis:
	Type:
	Area (ft <sup>2</sup> ):
Reason for Removal:	
Contract Removal Company:	
Job Description:	

**APPENDIX C – PERIODIC ASBESTOS INSPECTION FORM**

<ul style="list-style-type: none"> <li>▪ Survey Date: _____</li> </ul>	<ul style="list-style-type: none"> <li>Bulk Sample # _____ (yymmdd###)</li> </ul>
<ul style="list-style-type: none"> <li>▪ Building Name &amp; Location: _____</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Campus: _____</li> </ul>	<ul style="list-style-type: none"> <li>Bldg. Floor: _____</li> </ul>
<ul style="list-style-type: none"> <li>▪ Room Name, Number, or Description: _____</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Type of Material Sampled:</li> <li><input type="checkbox"/> Horizontal Pipe   <input type="checkbox"/> Vertical Pipe   <input type="checkbox"/> Pipe Elbow   <input type="checkbox"/> Ductwork   <input type="checkbox"/> Chiller Insulation   <input type="checkbox"/> Floor Mastic</li> <li><input type="checkbox"/> Air Handling Unit Insulation   <input type="checkbox"/> Boiler Insulation   <input type="checkbox"/> Floor Tile   <input type="checkbox"/> Cable Penetrations</li> <li><input type="checkbox"/> Diesel Engine Stack   <input type="checkbox"/> Asbestos Board   <input type="checkbox"/> Structural Fireproofing   <input type="checkbox"/> Wall Coating</li> <li><input type="checkbox"/> Ceiling Tile   <input type="checkbox"/> Other: _____</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Approximate Amount of Material (linear or square ft): _____</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Friable <input type="checkbox"/> Yes   <input type="checkbox"/> No</li> </ul>	<ul style="list-style-type: none"> <li>▪ Material properly labeled: <input type="checkbox"/> Yes   <input type="checkbox"/> No</li> </ul>
<ul style="list-style-type: none"> <li>▪ Condition: _____</li> </ul>	<ul style="list-style-type: none"> <li>▪ Material Damaged: <input type="checkbox"/> Yes   <input type="checkbox"/> No</li> <li>▪ Is Damage: <input type="checkbox"/> Localized or <input type="checkbox"/> Distributed</li> </ul>
<ul style="list-style-type: none"> <li>▪ Type of Damage: <input type="checkbox"/> Physical   <input type="checkbox"/> Water   <input type="checkbox"/> Deterioration</li> <li>▪ Description of Damage: _____</li> </ul>	

Comments: \_\_\_\_\_

Inspector's Name: \_\_\_\_\_

Signature: \_\_\_\_\_

**APPENDIX D - REVIEW OF ASBESTOS CONSULTANT OR CONTRACTOR  
QUALIFICATIONS**

**FORM USE:** Use to request Pre-Approval of an Asbestos Consultant or Contractor, prior to contracting for any work with the firm.

Name of Firm: \_\_\_\_\_

Address of Firm: \_\_\_\_\_

This business is a  sole proprietorship  partnership  corporation

This business is proposed to provide  asbestos consulting  asbestos contracting (check only one):

Principal Contact Name: \_\_\_\_\_

Phone Number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Insurance Coverage

The proposed firm has the following insurance coverages (copy of policy coverage summary attached):

Type of Insurance Coverage	Amount of Coverage	Policy Expiration Date
General Liability Coverage		
Errors and Omissions Coverage (Consultants Only)		
Asbestos Liability Coverage - This insurance coverage is <input type="checkbox"/> Claims Made <input type="checkbox"/> Occurrence		
The firm is able to be bonded up to		N/A

Contact the department of the regulating government responsible for overseeing asbestos consultants and contractors.

Agency Contacted: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Does the company, and all its personnel, have the necessary licenses/certifications as required by the regulating governmental agency to perform the requested work in the locations where they will be used:  Yes  No

Has the company performed work in the state:  Yes  No

Is the company currently performing work in the state:  Yes  No

Has the firm been cited for any violations:  Yes  No

*(if yes, answer the following):*

Date of Citation: \_\_\_\_\_

Cause of Citation: \_\_\_\_\_

Enforcement History: \_\_\_\_\_

The company's regulatory agency standing is acceptable to the Legal Department.



**APPENDIX F - CHECKLIST TO DOCUMENT RECEIPT OF PAPERWORK FOR AN  
ABATEMENT PROJECT**

Building Address:			
Floor/Location of Work:			
Proposed Asbestos Work:			
Contractor:			
Date of Proposed Work:			
Purchase Order or Contract Number:			
<b>Paperwork Required</b>	<b>When Required</b>	<b>Date Received/Sent</b>	<b>Initials of Receiver</b>
Notify WFUHS EH&S regarding asbestos work	Prior to start		
Appendix D – Review of Asbestos Consultant or Contractor Qualifications	Prior to start		
Appendix E – Guideline to Create a Scope of Work for Asbestos Removal	Prior to start		
Permits	Prior to start		
Licenses/Certifications	Prior to start		
Daily Log Sheets	Throughout project		
Intermediate Air Monitoring – Preliminary Reports	24 hours postsample		
Intermediate Air Monitoring – Preliminary Reports	24 hours postsample		
Intermediate Air Monitoring – Preliminary Reports	24 hours postsample		
Results of Area Monitoring and Visual Inspection	N/A		
Final Results of Intermediate Air Monitoring	24 hours postsample		
Final Clearance/Reoccupancy Air Monitoring	48 hours postsample		
Waste Manifest	File an exception report if manifest is not received within 45 days		
Copies to WFUHS EH&S			