

Louisiana State University

Office of Facility Services

Operating Instruction 4005

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SUBJECT: ASBESTOS MANAGEMENT

I. General

1. Asbestos is a mineral that can appear in a fibrous or spun form when separated from rock in the asbestos mining process. Protection from fire; absorption of heat from friction; high tensile strength as a reinforcing material; resistance to corrosion and insulation from heat, cold and noise are among the properties of asbestos that result in its use in thousands of industrial applications.
2. Asbestos fibers are microscopically small. Those which seem visible to the human eye are actually threads consisting of thousands of fibers. Each fiber is hundreds of times smaller than a human hair. The fibers are so fine that they can float in the air indefinitely without settling. They are not readily trapped by mucous or nose hairs, and therefore can easily enter the lungs during the normal breathing process. Once in the lungs, asbestos fibers may lodge there and remain for life.
3. Workers can assume a personal responsibility for protection against asbestos by learning the hazards of asbestos; complying with existing work rules and procedures; reporting hazardous conditions to supervisors; wearing personal protective equipment when required and by offering safety and health suggestions to supervisors.

II. Procedures

1. Actions taken must comply with federal, state, local, LSU System, LSU campus, LSU Office of Environmental Health & Safety and Facility Services regulations.

2. The Assistant Director of Environmental Services maintains the Asbestos Management Plan which indicates the locations of all known asbestos in all campus buildings.
3. A group of Facility Services employees shall be trained and certified as asbestos workers, asbestos inspectors, asbestos supervisors and asbestos designers as needed.
4. Facility Service employees shall be trained in asbestos awareness within 60 days of employment. The training program informs employees about the health hazards of asbestos exposure; the relationship between asbestos and smoking in producing lung cancer; the medical surveillance program; work assignments which could result in asbestos exposure and general emergency procedures.
5. Any asbestos worker, in addition to training topics listed above, shall be trained in operations which could result in asbestos exposure; appropriate work practices associated with the employee's job assignment; the purpose, proper use and limitations of respirators and protective clothing and specific emergency and clean up procedures.

III. Precautions

1. The following precautions will be taken prior to assigning employees to special (long-range) projects, routine maintenance or renovations to determine the possibility of any asbestos being encountered:
 - A. All long-range projects shall involve the Office of Environmental Health & Safety to ensure that no asbestos is present and/or provide for the safe encapsulation or removal prior to the commencement of the project.
 - B. When projects are in buildings which are known to contain asbestos, plans shall be delivered to an Asbestos Supervisor and/or Asbestos Project Designer showing modifications to be performed.
 - C. The Asbestos Supervisor or Asbestos Project Designer shall complete an **Asbestos Disposal Verification Form (ADVF)** to be filed with the project, so that Work Control can place start and end dates on the ADVF submitted to Work Control. The Asbestos Supervisor or Asbestos Project Designer will supply a monetary figure for the estimate.

- D. The Asbestos Supervisor and/or Asbestos Project Designer shall submit the ADVF to the Office of Environmental Health & Safety, who will then submit the necessary documentation to the Louisiana Department of Environmental Quality at least 10 DAYS PRIOR TO THE START OF THE PROJECT, with a copy of the ADVF sent to Facility Services.
- E. When the presence of suspected asbestos is encountered, work in the area will IMMEDIATELY CEASE. The Job Supervisor shall contact one of the following and inform them that asbestos is suspected and the job has been stopped pending investigation and clearance.
 - 1. Executive Director, Facility & Utility Operations
 - 2. Assistant Director, Environmental Maintenance
 - 3. Assistant Director, Campus Safety
- F. When a job has been stopped due to suspected asbestos, they will immediately obtain samples of the suspected material and/or air samples, if applicable. These samples will be delivered to a qualified testing laboratory by either the Office of Environmental Health & Safety or Environmental Maintenance.
- G. If an analysis by a qualified laboratory indicates that no asbestos is present, the work will continue.
- H. If it has been determined that asbestos is present, a decision will be made by the Facility Services Assistant Director of Environmental Maintenance regarding abatement requirements. Only trained employees holding valid LA DEQ certification in Asbestos Abatement will be allowed to encapsulate or remove asbestos, regardless of its quantity, to reduce the risk of exposure to students, faculty, staff or visitors. If it has been determined that a large-scale abatement is required, the following will be performed prior to any abatement being performed:
 - 1. Approved asbestos warning signs shall be placed at all entrances to the work area informing personnel in the area of the presence of asbestos and that breathing asbestos dust may cause serious bodily harm.

2. The HVAC system supplying the affected work area must be shut down and isolated to prevent entrainment of asbestos dust throughout the building. To avoid inadvertent activation of the HVAC system while asbestos abatement operations are in progress, the control panel must be tagged to advise employees not to activate the system and locked to prevent the unit from being turned on during the abatement.
 3. When the asbestos abatement work is occupied by certified personnel, escape routes must be identified. All entrances to the work area must be secured when abatement operations are not in progress.
 4. Non essential personnel will not be permitted to enter the work area.
- I. Approved methods of encapsulation and/or removal shall be used.
 - J. Asbestos-containing material shall be disposed of in accordance with university, local, state and federal rules and regulations.
 - K. When air clearance samples have determined that the abatement area is free of asbestos-containing material, the Assistant Director of Environmental Maintenance will notify the job site.

IV. Medical Surveillance Program

- A. A Medical Surveillance Program shall be implemented for all employees who are exposed to airborne concentrations of asbestos that exceed allowable limits as established by LA DEQ or who may at times be required to wear respiratory equipment. All examinations must be performed under the supervision of a licensed physician and shall be provided without cost to the employee. Examinations must include:
 1. complete physical with emphasis on the respiratory system
 2. examination of the cardiovascular system and digestive tract
 3. completion of a respiratory disease questionnaire
 4. a chest x-ray
 5. pulmonary function tests

- B. These examinations must be performed on an annual basis.
- C. If the employee is terminated, transfers or resigns, the employee must be examined within 30 days before or after the date of termination of employment.
- D. The employee must be provided with a copy of the physician's written opinion to the affected employee within 30 days of its receipt.

V. Airborne Measurement

- A. An accurate record of all airborne measurements taken to monitor abatement workers exposed to asbestos must be maintained. The record is to include:
 - 1. the date of measurement
 - 2. operation involving exposure
 - 3. sampling and analytical methods used and evidence of their accuracy
 - 4. number, duration and results of samples taken
 - 5. type of respiratory protective devices worn
 - 6. name, LSU ID # and the results of all employee exposure measurements

VI. Employee Records

- A. An accurate record for each employee subject to medical surveillance must be maintained at Student Health. The record must include:
 - 1. name and LSU ID # of the employee
 - 2. physician's written opinions
 - 3. any employee medical complaints related to exposure to asbestos
 - 4. information provided to the examining physician as described under medical surveillance

- B. All records pertaining to medical surveillance must be maintained for a period of 30 years.
- C. All employee training records must be maintained for one (1) year beyond the last date of employment.

VII. Fit Testing of Respirator

- A. Individuals whose job assignments require the use of a respirator will ensure that nothing interferes with the facial seal on the mask. This includes facial hair, temple bars on glasses, etc.
- B. Proper fit testing of the respirator will be performed annually or more frequently if changes in the employee's seal occurs. Fit testing