



## **Asbestos Operations and Maintenance Program**

### **I. Policy**

The purpose of these procedures is to provide California State University, Fullerton employees with safe methods for working with and around asbestos containing materials (ACM) identified on our campus.

### **II. Authority**

Title 8 of the California Code of Regulations, Sections 341.6, 1529.

### **III. Scope**

### **IV. Definitions**

**Amended Water** – Water to which surfactant (wetting agent) has been added to increase the ability of the liquid to penetrate ACM.

**Asbestos** – Fibrous forms of various hydrated minerals including chrysotile (fibrous serpentine), crocidolite (fibrous riebeckite), amosite (fibrous cummingtonite-grunerite), fibrous tremolite, fibrous actinolite, and fibrous anthophyllite.

**Asbestos Containing Material (ACM)** - Any material containing more than one percent asbestos.

**Asbestos Containing Building Material (ACBM)** – Surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building.

**Asbestos Containing Construction Material (ACCM)** – Any manufactured construction material which contains more than 1/10<sup>th</sup> of one percent asbestos by weight. The square footage of ACCM involved must equal or exceed 100 sq. ft. at a single worksite.

**Asbestos Related Work** – Any activity, which by disturbing asbestos-containing construction materials, may release asbestos fibers into the air, and which is not related to its manufacture, the mining or excavation of asbestos-bearing ore or materials, or the installation or repair of automotive materials containing asbestos.

**Class I Asbestos Work** - Removal/abatement of thermal insulation and surfacing material. All Class I work on campus is contracted to a licensed asbestos abatement contractor.

**Class II Asbestos Work** – Activities involving the removal of ACM, not including TSI or surfacing material. This includes, but is not limited to, the removal of ACM wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

**Class III Asbestos Work** - Repair and maintenance operations, where employees may disturb ACM, including TSI and surfacing ACM and PACM.

**Class IV Asbestos Work** – Maintenance and custodial activities during which employees contact but do not disturb ACM or PACM. Also includes activities to clean up dust, waste, and debris resulting from Class I, II, and III activities. All clean up of debris resulting from Class I, II, and III activities are done by Class II and III trained workers.

**Glovebag** – An impervious plastic bag-like enclosure affixed around not more than 60”x60” asbestos containing material, with glove-like appendages through which material and tools may be handled.

**Initial Exposure Assessment** - Assessment of a job by an asbestos contractor/supervisor or building inspector to ensure all precautions are taken prior to the start of work. The assessment is based on previous exposure and area monitoring, observations and information relevant to the job.

**Negative Exposure Assessments** - An assessment of an asbestos job that shows exposure will be below the Permissible Exposure Level (PEL). This assessment is confirmed by historical, objective past job data (exposure monitoring) that shows airborne fibers are not released in excess of the PEL. Data should show a high degree of certainty that there was no employee exposure under similar conditions.

**Permissible Exposure Level (PEL)** – No employee shall be exposed to an airborne concentration of asbestos in excess of 0.1 fibers/cc of air over an 8-hour time-weighted average.

**Presumed Asbestos-Containing Material (PACM)** – Any material presumed to containing more than one percent asbestos based on the material, without having it sampled.

**Surfacing Materials** – material that is sprayed, troweled-on or otherwise applied to surfaces; such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes.

**Thermal System Insulation (TSI)** – ACM applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain.

## VI. Program

### Facilities Operations Service Center Procedures for Asbestos Work Orders

When asbestos is identified to exist in an area where Physical Plant work is to be completed, an Initial Exposure Assessment will be conducted by Environmental Health and Safety or a Facilities Operations 40-hour Contractor/Supervisor trained person.

When work will involve contact with ACBM, the Service Center Work Order will be marked "ASBESTOS" and all required safety procedures will be implemented.

Environmental Health and Safety will retain asbestos records.

### Class I Work

California State University, Fullerton does not conduct Class I work. All Class I abatement jobs are contracted out.

### Class II Work

The procedures listed below can be altered by an asbestos certified supervisor if a negative exposure assessment has been completed.

All Class II work must have the following:

- An asbestos certified supervisor on the job.
- All employees should have 40-hour AHERA training or 32-hour worker training.
- Removal area barricaded with caution tape and signed.
- All non-asbestos trained personnel removed from the area.
- HVAC turned off to the removal location.
- Wear respiratory protection with HEPA filtration.
- At least one worker should wear an air monitor.
- Bag or wrap and label the material and place in the designated asbestos dumpster.
- Wear personal protective clothing unless a negative exposure assessment has been developed.

Vinyl asbestos flooring:

- Remove no more than 60 inches in length and width.
- Assume all flooring is asbestos containing unless proven otherwise by testing.
- Use wet methods for removal of flooring and adhesive backing
- Omit wetting when tiles are heated and removed intact.
- Use vacuums equipped with HEPA filters for cleanup.
- Do not sand flooring or the backing.
- Do not rip up resilient sheeting; wet and cut.

- Do not use mechanical chipping unless in negative pressure containment.

#### Asbestos ceiling tile removal/replacement:

- Remove no more than 60 inches in length and width.
- Place impermeable drop cloths below the removal site.
- Lightly spray the ceiling tile with water to
- reduce friability.
- Do not cut or break the material unless not feasible.
- Use vacuums equipped with HEPA filters for cleanup.

#### Roofing repairs:

- Isolate HVAC air intakes.
- Remove no more than 60 inches in length and width.
- Use wet methods when possible.
- Continuously mist when possible.
- Immediately HEPA vacuum all loose dust along the cut.
- Encapsulate remaining cut areas.

#### Transite siding, panels and piping:

- Do not cut, abrade, or break unless methods less likely to result in asbestos fiber release cannot be used.
- Spray material with amended water.
- Use vacuums equipped with HEPA filters for cleanup.

#### Asbestos gaskets:

- Use glovebag techniques when feasible.
- Thoroughly wet with amended water.
- Scrape residue using wet method.

### **Class III Work**

All Class III work personnel must have the following:

- 16 Hour training Operations and Maintenance training.
- An asbestos certified supervisor available.
- Barricade removal area with caution tape and sign.
- All non-asbestos trained personnel removed from the area.
- HVAC turned off to the removal location.
- Wear respiratory protection with HEPA filtration.
- If a spill occurs, notify an asbestos certified supervisor.
- Bag or wrap and label the material and place in the designated asbestos dumpster.

Removal of TSI for maintenance/repair purposes:

- 40-hour AHERA training.
- Do not drill, cut, abrade, sand or chip TSI.
- Use glove bags whenever possible.
- Use impermeable drop cloth.
- Use amended water.

Maintenance work above McCarthy Hall ceiling tile:

- Whenever possible, notify room occupants prior to work.
- Location of work must be posted and occupants relocated during ceiling tile removal and replacement.
- Room occupants may re-enter the room during maintenance operations not involving ceiling tile movement.
- Avoid breaking or cutting ceiling tile.
- If modifications to the tiles are required, notify a 40-hour trained asbestos employee or supervisor.

**Class IV Work**

All employees involved in Class II and III work are responsible for cleanup of asbestos containing debris and do the following:

- Use wet methods for cleanup.
- Use HEPA vacuum.
- Wear respirators.
- Bag or wrap and label the material and place in the designated asbestos dumpster.

**VII. Training**

All Class II work and some portions of Class III (glove bag maintenance) require 40-hour worker certification as a minimum. Annual certification is required.

Class III workers requires 16-hour Operations and Maintenance course with an annual refresher.

**VIII. Medical Surveillance**

Class II workers must receive annual asbestos physical.

Class III and IV workers must receive annual respiratory physicals.

**IX. Exposure Monitoring**

Exposure monitoring must be conducted during Class II and Class III glove bag operations.

Exposure monitoring can be conducted by a Facilities Operations or EHS 40-hour trained asbestos person or asbestos building inspector.

Testing and analysis will be conducted by a State Environmental Laboratory Accreditation Program (ELAP) certified lab.

Funding for sample testing of department work order requests will be charged to the requesting department whenever possible.

EHS will maintain exposure monitoring records for development of Negative Exposure Assessments.

**Responsible Executive:** Vice President for Administration and Finance

**Responsible Office:** Environmental Health and Safety

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