UNIVERSITY OF SOUTH CAROLINA
NEGATIVE EXPOSURE ASSESSMENT

ACTIVITY
INSERTING AND REMOVING SCREWS FROM ACM/PACM WALLBOARD SYSTEMS

DATE ESTABLISHED
1/15/13

LAST REVISION
6/16/16

BACKGROUND
Exposure to asbestos can occur when asbestos containing materials (ACM) are disturbed in a manner that causes asbestos fibers to be released into the air. Airborne fibers can be inhaled, where they can be deposited into the lungs, causing a variety of health effects such as lung cancer, asbestosis and pleural mesothelioma.

OSHA has established a Permissible Exposure Limit (PEL) for asbestos fibers 0.1 fibers/cc, expressed as an 8 hour time weighted average. The 30 minute excursion limit has been established at 1.0 fibers/cc.

ACTIVITY
This NEA establishes that by following this procedure, employees inserting and/or backing out screws on wallboard systems containing ACM will not be exposed to an airborne concentration of asbestos fibers that exceeds the OSHA PELs (8-hour or 30 min. excursion).

This NEA may be used for the manual or mechanical installation of screws, not to exceed ¼” diameter.

Also of concern when cutting into ACM wall material is the potential for leaving behind asbestos containing dust and debris. The following work practices ensure that dust and debris are promptly and effectively cleaned.

16-hour OSHA Class III training is required for USC employees involved in this activity.

EQUIPMENT LIST
- Barrier tape and asbestos warning sign
- Duct tape or painter’s tape
- 6-mil poly sheeting
- Cloth rags or paper towel
- Screwdriver/power drill with appropriate bits
- Small spray bottle with amended water.
- HEPA vacuum
- Asbestos waste bag

PROCEDURE
1. Submit notification to building occupants. (Columbia Facilities - use FMC Notify system)
2. Establish a “regulated area” with proper warning sign. Non-trained, non-authorized personnel may not enter the regulated area.
3. Do not eat, drink or smoke while working.
4. Remove any in-the-way furniture. Place a sheet of 6-mil poly on floor beneath work activity. Tape one end of poly to wall approximately 6 inches up. Poly should extend at least 3 feet away from wall on the floor and extend at least 3 feet on each side of the work area.
5. For installation of screws:
   a. Mark the location on the surface where screw is to be inserted.
   b. Lightly spray surface with amended water
   c. Insert screw normally
   d. Wipe away excess water with damp rag or paper towel.
6. For removal of screws:
   a. Carefully back out screw. As screw emerges from the wall, spray lightly with amended water.
   b. Immediately place screw in asbestos waste bag.
7. Wipe water and any excess debris from wall. Dispose of towel/rag in asbestos waste bag.
8. Before finishing job OR moving poly to another location, use HEPA vacuum to remove any dust/debris from poly sheeting. Remove any remaining material with wet rag/towel. Place rags/towels in asbestos waste bag.
9. When the job is finished and poly sheeting has been cleaned, carefully roll up sheeting and place in waste bag.
10. Before leaving jobsite, inspect area to ensure no dust or debris has been left behind. If so, remove via wet wiping or HEPA vacuum as appropriate.
11. Place waste bag in designated compartment on truck and transport directly to HAZMAT office. After dropoff, inspect inside of transport compartment and wet wipe any evidence of leakage.

SUPPORTING DATA

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<th>DATE</th>
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*sample was subsequently analyzed via TEM, no asbestos structures detected*