UNIVERSITY OF SOUTH CAROLINA
NEGATIVE EXPOSURE ASSESSMENT

ACTIVITY
INSERTING AND REMOVING NAILS FROM ACM/PACM WALLBOARD SYSTEMS

DATE ESTABLISHED 2/28/13
LAST REVISION 7/26/16

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 removing nails 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 insertion and removal of nails and punches (not to exceed ¼" diameter).

Also of concern when disturbing 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
- Cloth rags or paper towel
- Hammer/nails
- 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. For installation of nails using a hammer:
   a. Mark the location on the surface where nail is to be inserted.
   b. Hammer in nail normally
   c. Inspect area to ensure no joint compound was dislodged. If so, immediately vacuum debris using HEPA vacuum.
5. For removal of nails:
   a. Remove nail normally. As nail is removed from the wall, mist the nail lightly with amended water.
   b. Immediately place nail in asbestos waste bag.
   c. Inspect area to ensure no joint compound was dislodged. If so, immediately vacuum debris using HEPA vacuum.
7. 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

<table>
<thead>
<tr>
<th>DATE</th>
<th>LOCATION</th>
<th>DURATION (min)</th>
<th>EXCURSION (f/cc)</th>
<th>TWA (f/cc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/23/12</td>
<td>Hamilton College</td>
<td>31</td>
<td>0.097 *</td>
<td>0.0063 *</td>
</tr>
<tr>
<td>11/8/12</td>
<td>Hamilton College</td>
<td>35</td>
<td>&lt;0.031 *</td>
<td>&lt;0.0023 *</td>
</tr>
<tr>
<td>1/23/15</td>
<td>Close/Hipp</td>
<td>30</td>
<td>0.063*</td>
<td>0.0039*</td>
</tr>
</tbody>
</table>

*sample was subsequently analyzed via TEM, no asbestos structures detected