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 drilling holes into surfaces containing ACM/PACM 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 in conjunction with drill bits not to exceed ¼” diameter.

Also of concern when drilling through surfaces 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 towels
- Drill and drill bits
- Small spray bottle with amended water.
- HEPA vacuum
- Asbestos waste bag

PROCEDURE

1. Submit a notification to building occupants through 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. Drill holes as per usual. As drill bit penetrates wall, spray entry point with amended water.
6. Spray drill bit with amended water as it is removed from the wall. Make sure all dust and debris attached to the bit is sufficiently wet to prevent airborne dust.
7. Wipe water and any excess debris from wall.
8. With wet paper towel or cloth rag, remove excess dust and debris from drill bit. Dispose of towel/rag in
asbestos waste bag.

9. 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.

10. When the job is finished and poly sheeting has been cleaned, carefully roll up sheeting and place in waste bag.

11. 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.

12. 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>34</td>
<td>0.053 *</td>
<td>0.0038 *</td>
</tr>
<tr>
<td>11/8/12</td>
<td>Hamilton College</td>
<td>37</td>
<td>0.16 *</td>
<td>0.012 *</td>
</tr>
<tr>
<td>11/20/12</td>
<td>Hamilton College</td>
<td>41</td>
<td>0.11</td>
<td>0.011</td>
</tr>
<tr>
<td>1/15/13</td>
<td>Longstreet Theater</td>
<td>30</td>
<td>0.047</td>
<td>0.029</td>
</tr>
<tr>
<td>1/22/15</td>
<td>Close/Hipp</td>
<td>30</td>
<td>0.67*</td>
<td>0.041*</td>
</tr>
</tbody>
</table>

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