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| <b>JSC Safety and Health Requirement</b> | JPR No.          | <b>1700.1L</b>    |
|  | Effective Date:  | <b>12/20/2018</b> |
|  | Expiration Date: | <b>12/20/2023</b> |
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## Chapter 11.11 Wet Removal of Materials

### 11.11.1. Requirement

11.11.1.1 Asbestos workers shall follow these requirements to remove asbestos materials:

- a. Remove asbestos materials at JSC only using wet removal procedures. Other techniques require specific prior approval by the Environmental Office and Occupational Health. Wet removal procedures require wetting the material before removal begins, and keeping it wet as it is removed and while it is being bagged. These procedures reduce the generation of airborne fibers during removal and lessen the effort required to remove the material. Wet removal also increases the settling rate of released fibers and prevents the re-suspension of fibers when the ACM is bagged.
- b. Do not use dry removal techniques at JSC without specific authorization from the Environmental Office and Occupational Health. Make a written request to the Environmental Office and Occupational Health to use dry removal techniques. Justify why dry techniques must be used, and include methods to protect workers and other building occupants. Dry removal methods require prior TDSHS approval per 40 CFR 61.145. If such methods are proposed. Give sufficient lead time for all necessary approvals.
- c. Apply an encapsulant to abated areas after removal to ensure against fiber release, and to bond any edges that are not within the scope of the task. Encapsulants, whether penetrating or bridging, require approval from the EPA, OSHA, or NIOSH.

### 11.11.2. Amended water

11.11.2.1 Adding a wetting agent to water further enhances the positive effects of wet removal. The wetting agent aids in the penetration of ACM and increases the probability of individual fiber wetting. Amended water may be commercially purchased or prepared as follows:

- a. To prepare amended water in a one quart spray bottle:
  - (1) Fill half full with water
  - (2) Add 1/6 cup (2 big squirts) of liquid dish detergent
  - (3) Fill up the rest of the way with water.
- b. To prepare amended water in a 2 gallon sprayer
  - (1) Fill half way with water
  - (2) Add 1 ½ cups of liquid dish detergent
  - (3) Fill up the rest of the way with water.

NOTE: Any commercial liquid dish detergent is permitted. Foaming hand soap, commonly found in the restrooms around JSC, is not acceptable as it has already been diluted with water.

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**11.11.3. Wetting procedures**

11.11.3.1 Asbestos workers shall use the following steps for wetting:

- a. Thoroughly wet the ACM with a low-pressure spray of amended water. Lightly spray the material with amended water to initially wet the surface; then spray to saturate it. Since high-pressure water may cause elevated airborne fiber concentrations, you shall use low-pressure systems.
- b. Wait before beginning removal to allow the water to thoroughly penetrate the materials.