

South Carolina Department of Labor, Licensing and Regulation  
Division of Labor  
Office of Occupational Safety and Health  
Columbia, South Carolina 29211

**OSH Program Directive Number 82-1910.1045-1**

**Subject:** Showering Requirements of the Acrylonitrile Standard, Subarticle 6, Section 1910.1045.

**Standard:** Subarticle 6, Section 1910.1045 (m) (2), Rules and Regulations, Commissioner of Labor, State of South Carolina.

**Cross Reference to Federal Standards:** 29 CFR 1910.1045 (m) (2).

**Background:** This directive intends to clarify the necessity for showering under the acrylonitrile standard as interpreted by federal OSHA.

**Interpretation:**

- a. When liquid acrylonitrile is handled in other than totally closed systems, and employees working with or around the liquid must wear impermeable protective clothing or other equipment because eye or skin contact may occur, then clearly, in accordance with Subarticle 6, Section 1910.1045 (m) (2), the employees must shower at the end of the work shift. It is sound practice to establish a blanket, unconditional requirement for employees to shower in the described circumstance, because there is no practical way of knowing for sure that any given employee did not actually come into contact with the liquid at some time or other during the work shift.
- b. Some employers, however, require employees working solely around totally closed systems for handling acrylonitrile to wear impermeable protective clothing, on the off-chance that a break in the system might result in a “massive release” of acrylonitrile. We do not interpret Subarticle 6, Section 1910.1045 (m) (2) to require these employees to shower at the end of the work shift if no break in the closed system occurred. Here there would be no sound basis for requiring the employees to shower at the end of the work shift since, if there were no break in the closed system, the employees obviously would not have been exposed to liquid acrylonitrile, and showering would be unnecessary. Moreover, it appears highly unlikely that a break in the system could occur without supervisory employees being aware of it. We do interpret Subarticle 6, Section 1910.1045 (m) (2) to require that these

employees shower at the end of the work shift, however, should a break in the closed system occur.

**Effective Date:** This instruction is effective upon receipt and will remain in effect until cancelled or superseded by amendment to the Rules and Regulations.

William M. Lybrand, Director  
March 19, 1982