

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 94-1910.215/1926.303/702-4/1/1**

**Subject:** Abrasive Operations Using Cutoff Wheels and Masonry Saws

**Standard:** Subarticle 6, §1910.215, §1926.303, §1926.702 (i), Rules and Regulations, Commissioner of Labor, State of South Carolina.

**Cross Reference to Federal Standards:** 29 CFR 1910.215, 1926.303, 1926.702 (i)

**Cancellation:** Existing Program Directive Numbers 77-1910.215/1926.700-2/2 dated March 25, 1977 and 81-1910.215-3 dated August 20, 1981, are cancelled.

**Background:**

- (1) Cutoff machines utilize abrasive wheels and should be cited under 29 CFR 1910.215, abrasive wheel machinery. The source standard, ANSI B7.1-1970, addresses cutoff wheels. The American National Standards Institute has issued revised ANSI V7.1 standards dated 1978 and 1988. Both the ANSI B7.1-1978 and the current standard, ANSI B7.1-1988, permit a maximum angular exposure of 180°.
- (2) The existing OSHA regulation was adopted from the ANSI B.7.1-1970, and therefore allows 150° and 180° maximum angular exposure, or to substantiate any direct and immediate relationship of such a choice to safety and health. Therefore, cutoff machines that are not used in construction (i.e. masonry saws) with more than 150° of angular exposure, and not exceeding 180°, shall be treated as de minimis violations.
- (3) For construction, the existing OSHA regulations, 29 CFR 1926.303 and .702 (i), allow a 180° angle of exposure for masonry saws such as diamond or tungsten carbide type (water cooled), and the 180° angle of exposure shall not be treated as a violation when a masonry saw that is used in construction has 180° of the blade (wheel) exposed.

**Interpretation:**

- (1) When the guard for a cutoff wheel (not masonry) fails to comply with the 150° maximum angular exposure required at

29 CFR 1910.215 (b) (5) or 29 CFR 1926.303 (d), but does not allow greater than 180 maximum angular exposure, the violation shall be treated as de minimis.

- (2) When the guard for a masonry saw used in construction (i.e., used to cut tile, brick, concrete block, but not steel) or a tungsten or diamond blade (water cooled) is semicircular, it is in compliance as set forth in 1926.702 (i).

**Effective Date:** This instruction is effective upon receipt and will remain in effect until cancelled or superseded by amendment to the Rules and Regulations.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  
October 13, 1994