

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 79-1910.212-10

Subject: Article VI, Section 1910.212 (a) (5) As Applied to Cooling Fans for Electrical Transmission and Distribution Transformers and Associated Electrical Equipment.

Standard: Article VI, Section 1910.212 (a) (5), Rules and Regulations, Commissioner of Labor, State of South Carolina.

Cross Reference to Federal Standards: 29 CFR 1910.212 (a) (5).

Background: The purpose of this directive is to clarify the use of Section 1910.212 (a) (5) as it relates to the guarding of cooling fans for electrical transmission and distribution transformers, circuit breakers, and other associated electrical equipment located at transmission stations and distribution substations.

It has been brought to the attention of the Division of OSH that cooling fans on referenced electrical equipment are normally furnished with guards for fan blades that have openings greater than one-half (1/2) of an inch. According to electrical utility engineers, the requirement to reduce the guard openings to one-half (1/2) inch or less would greatly affect the cooling capacity of the fans. Also the safety of the employees would not be substantially increased since these fans are provided with guards and employee exposure to such fans is very low due to the time employees spend at such locations. The major concern is that the employees are constantly aware that the cooling fans on such electrical equipment can and do operate automatically at transmission stations and at distribution substations.

Interpretation: Under the following conditions, cooling fans with blade guards having openings greater than one-half (1/2) of an inch in transmission stations and in distribution substations shall be considered to be de minimis:

- (a) That fan blades of cooling fans on such electrical equipment are provided with a guard of suitable material properly installed and secured.

- (b) That durable signs warning of automatic operation of the cooling fans be posted conspicuously at each transmission station or distribution substation to ensure that employees are aware of such hazard.

Effective Date: This instruction is effective upon receipt and will remain in effect until cancelled or superseded by amendment to the Rules and Regulations.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
April 30, 1979