

**North Carolina Department of Labor  
Occupational Safety and Health Division**

**Raleigh, North Carolina**

Field Information System

Standards Notice 19C

**Subject:** Class I, Division 2; Class I, Zone 2; and Class II, Division 2 Hazardous Locations for Spray Finishing

A. **Purpose.**

The purpose of this standards notice is to clarify Class I, Division 2; Class I, Zone 2; and Class II, Division 2 hazardous locations surrounding spray finishing operations.

B. **Applicable Standards.**

1. **29 CFR 1910.107(c)(2).** *Minimum separation.* There shall be no open flame or spark producing equipment in any spraying area nor within 20 feet thereof, unless separated by a partition.
2. **29 CFR 1910.107(c)(6).** *Wiring type approved.* Electrical wiring and equipment not subject to deposits of combustible residues but located in a spraying area as herein defined shall be of explosion-proof type approved for Class I, group D locations and shall otherwise conform to the provision of subpart S of this part, for Class I, Division 1 Hazardous Locations. Electrical wiring, motors, and other equipment outside of but within twenty (20) feet of any spraying area, and not separated therefrom by partitions, shall not produce sparks under normal operating conditions and shall otherwise conform to the provisions of subpart S of this part for Class I, Division 2 Hazardous Locations.
3. **NFPA 70 – 2017 – National Electric Code (Article 516.5(D) – Spray Application, Dipping, Coating, and Printing Processes)**
4. **NFPA 33 – 2018 – Spray Application Using Flammable or Combustible Materials (Paragraphs 6.5.1 and 6.5.2 – Electrical Devices in Areas Adjacent to or Connected to Spray Areas)**

C. **Discussion.**

29 CFR 1910.107 was originally adopted from NFPA 33-1969. The 20-foot distance specified in 29 CFR 1910.107(c)(2) and (c)(6) does not provide a direction.

The NFPA 70-2017 (National Electrical Code) and NFPA 33-2018 specify both vertical **and** horizontal distances, 10 feet and 20 feet, respectively, measured from the open spraying operation or spray area. For closed-top, open-face, and open-front spray booths or spray rooms, which are to be considered as Class I, Division 2; Class I, Zone 2; Class II, Division 2; or Zone 22 locations, the corresponding distances, as measured from the opening(s) of the spray booth or spray room, are reduced to 3 feet.

D. **Interpretations.**

1. The 20-foot distance referenced in 29 CFR 1910.107(c)(2) and (c)(6) is interpreted to mean 20 feet horizontally.
2. If an employer is in compliance with the 20-foot horizontal distance, but is not meeting the 10-foot vertical distance specified in either NFPA 33-2018 or NFPA 70-2017 for unenclosed spray processes, a general duty clause citation should be considered. If a general duty citation is not issued, the employer will be notified of and encouraged to meet the vertical distances.
3. With regards to closed-top, open-face, and open-front spray booths and spray rooms, an employer complying with the 3-foot requirements of NFPA 33-2018 or NFPA 70-2017 Article 516 is considered to be in compliance with the applicable portions of 29 CFR 1910.107.

E. **Effective Date.**

SN 19B is canceled. This standards notice will be effective on the date of signature. It will remain in effective until revised or canceled by the director.

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Signed on Original  
J. Edgar Geddie, Ph.D.  
Health Standards Officer

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Signed on Original  
Kevin Beauregard  
Director

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3/21/2019  
Date of Signature