

**NORTH CAROLINA DEPARTMENT OF LABOR
OFFICE OF OCCUPATIONAL SAFETY AND HEALTH
RALEIGH, NORTH CAROLINA
August 6, 1975**

Standards Notice 19

TO: All Supervisors, Consultants, Safety Officers, Industrial Hygienists and Staff.

SUBJECT: Class I. Division 29 Hazardous locations for spray painting

A.

1. 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. 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 provisions 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. NEC Article 516-2(b)

All space within 20 feet horizontally in any direction from the open face of a spray booth, and all space within the room but beyond the limits for Class I, Division 1 as defined in Section 516-2(a) for extensive open spraying, for dip tanks and drain boards and for other hazardous operations, shall be considered to be Class I. Division 2 locations unless the authority having jurisdiction judges otherwise.

B. Discussion

The 1974 National Fire Code in NFPA 33 specifies both vertical and horizontal distances, measured from the front of the booth or room, which are to be considered as Class I. Division 2 Hazardous Locations. The distances specified by the 1974 Code are different from the ones quoted above under section

A. [Figure 1](#) is a diagram indicating the extent of the Class I Division 2 location specified in section A. [Figure 2](#) and [Figure 3](#), attached, give the distances considered to be Class I, Division 2 Hazardous Locations. Whether a firm may

use the distances specified by Figure 2 or Figure 3 depends upon whether or not condition A or B, quoted below from NFPA 33, is met.

"The Class I Division 2 locations shown in Figures 2 and 3 shall extend from the open face, or open front of the spray booth in accordance with the following:

1. if the ventilation system is interlocked with the spraying equipment so as to make the spraying equipment inoperable when the ventilating system is not in operation, the space shall extend five feet from the open face or open front of the booth or room, and as otherwise shown in Figure 2.
2. If the ventilation-system is not interlocked with the spraying equipment so as to make the spraying equipment inoperable when the ventilation system is not in operation, the space shall extend ten feet from the open face or open front of the booth or room,, and as otherwise shown in Figure 3."

- Interpretation

Since the NFPA has revised the distances from the spraying area considered to be Class Is Division 2 locations and since the NFPA is considered as an authority regarding fire protection, we will not cite per distances quoted under A. We will use the distances listed under Figure 2 and Figure 3 as the extent of a Class I, Division 2 area. The employer will be informed of the standards quoted and the required distances, and also informed of the new (1975) NFPA distances.

Citations will not be issued if the employer meets the revised distances on Figures 2 and 3.

L.A. Weaver R.P. Boylston
Standards Engineer OSHA Director

Signed on original

Fig. 1
Extent of Class 1
Division 2 hazardous
location
1970 DATA

Fig. 2.
Extent of Class 1
Division 2 hazardous
location

Fig. 3.
Extend of Class 1
Division 2 hazardous
location