

NFPA Formal Interpretation Request Form

(This information is requested in Section 6 of the Regulations Governing Committee Projects)

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NFPA Document No. 12A Edition 1980 Paragraph Reference 2-1.1.1

Did this question arise from an actual field situation? Yes ☒ No ☐

Please state your business interest in the matter and identify other parties involved:

On June 20, 2002, the NRC held an open regulatory conference with Florida Power & Light Company (FPL) to discuss FPL's position in response to NRC's Draft Apparent Violation concerning the adequacy of their Total Flooding Halon 1301 Fire Extinguishing system installed in St. Lucie Unit 1 Cable Spreading Room. This Formal Interpretation request is a result of information presented by a member of the 12A Technical Committee (consulting to FP&L) that differs from the NRC Staff Fire Protection Engineers understanding of the 12A Standard.

Question: (Should be worded so that it can be answered with a yes or a no.)

Background. Paragraph 2.1.1.1 states in part, "to ensure the effective extinguishment of the fire in the specific combustible materials involved..." Paragraph A-2-1 states in part, "From a performance viewpoint, a total flooding system is designed to develop a concentration of Halon 1301 that will extinguish fires in combustible materials located in an enclosed space.

Question. Is it the intent of the Technical Committee that a Total Flooding Halon 1301 Fire Extinguishing System, designed and installed in accordance with NFPA 12A, be capable of extinguishing a fire in the fixed combustible material within the protected enclosure?

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Attachment 1

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HALON 1301 SYSTEMS

Chapter 2 Total Flooding Systems

2-1* General Information.

2-1.1 Uses.

2-1.1.1 This type of system may be used where there is a fixed enclosure about the hazard that is adequate to enable the required concentration to be built up and maintained for the required period of time to ensure the effective extinguishment of the fire in the specific combustible materials involved where the ambient temperature is above -70°F (-57°C).

2-1.1.2 Total flooding systems may provide fire protection within rooms, vaults, enclosed machines, ovens, containers, storage tanks and bins. Where ambient temperatures exceed 900°F (482°C), see A-1-6.1(b).

2-1.1.3* Halon 1301 total flooding systems shall not be used in concentrations greater than 10 percent in normally occupied areas. For the purposes of this standard, a "normally occupied" area is defined as an area intended for occupancy. Areas which may contain 10 percent Halon 1301 shall be evacuated immediately upon discharge of the agent. Where egress cannot be accomplished within 1 min, Halon 1301 total flooding systems shall not be used in normally occupied areas in concentrations greater than 7 percent. (See A-1-6.1.)

2-1.1.4 Halon 1301 total flooding systems utilizing concentrations greater than 10 percent but not exceeding 15 percent may be used in areas not normally occupied, provided egress can be accomplished within 30 sec. Where egress cannot be accomplished within 30 sec or concentrations greater than 15 percent must be used, provisions shall be made to prevent inhalation by personnel. (See A-1-6.1.)

2-1.2 General Requirements. Total flooding systems shall be designed, installed, tested and maintained in accordance with the applicable requirements in Chapter 1 and with the additional requirements set forth in this chapter.

2-2 Hazard Specifications.

2-2.1 Types of Fires.

2-2.1.1 Fires which can be extinguished by total flooding methods may be divided into three categories