NFPA 10, 2007 Edition Mandates Replacing Outdated Extinguishers

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Portable Extinguishers has just been released and the standard now includes requirements to remove and replace outdated extinguishers. NFPA 10, 2007 edition states "4.4.1 Dry chemical stored pressure extinguishers manufactured prior to October 1984 shall be removed from service at the next 6-year maintenance interval or the next hydrotest interval, whichever comes first."

In the late 1970s, UL, along with the NFPA 10 committee and some fire extinguisher manufacturers, conducted After this testing, "ANSI/UL 299, Standard for Dry Chemical Fire Extinguishers" as referenced in "NFPA 10 Standard for Portable Fire Extinguishers," was revised to require any extinguisher weighing more than 12 lb (gross weight), having a 2A rating and/or 20B rating or higher, to use a hose. Having a hose on an extinguisher makes it very difficult to hold the extinguisher in any other position than upright, and makes it easy to properly direct the discharge of agent. Before the new standard, 5 lb, 6 lb, 10 lb, and even 20 lb capacity extinguishers were being

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a series of fire tests with novice operators. These tests concluded that changes in fire extinguisher design were needed in order to better assure proper operation by novice operators.

Testing showed that many novice operators had trouble keeping the extinguisher upright when it did not have a discharge hose and nozzle. A novice operator tended to grab the bottom of an extinguisher and tilt or invert it, resulting in an ineffective discharge.

manufactured without a hose assembly, using only a fixed nozzle.

Testing with live fires and novice operators helped to develop new operating instructions that used pictograms, which proved to be more easily understood. Additionally, new NFPA use Standards and Codes that showed which extinguisher should be used on a specific type of fire were developed. This eliminated some confusion that was observed with novice operators. The

new operating instructions and use codes became mandatory with the 1998 edition of UL 299 and the adoption of this standard by the fire codes.

With Standards and Codes now referencing the revised UL 299, manufacturers were required to produce extinguishers incorporating many improvements designed to help ensure safe and effective use by novice operators. These improvements were not theoretical in nature. The improvements had been tried and tested using novice operators and live fires.

Thousands of extinguishers manufactured prior to October of 1984, are still being used and serviced today. Newly released 2007 edition of NFPA 10 now mandates replacement of these stored-pressure (non-cartridge operated) units with more effective, modern extinguishers.

Chances are, if such extinguishers exist in a facility:

- They are or soon will be over 20 years old with no factory warranty in effect.
- The manufacturer is no longer in business, placing the sole liability on you and your customer for "fitness of purpose."
- Even if the manufacturer is still making fire extinguishers, the model may possibly have been discontinued. Are parts still available? Will it be possible to maintain its UL Listing?

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NFPA 10, 2007 edition states: "4.4.2 Any extinguisher that can no longer be serviced in accordance with the manufacturer's maintenance manual is considered obsolete and shall be removed from service." In the new 2007 Edition of NFPA 10, several types of extinguishers were added to the list of extinguishers that must be removed from service or phased-out of service. The following is an excerpt:

- "4.4 Obsolete Extinguishers. The following types of fire extinguishers are considered obsolete and shall be removed from service:"
- (9) Pressurized water extinguishers manufactured prior to 1971
- (10) Any extinguisher that needs to be inverted to operate
- (11) Any stored pressure extinguisher manufactured prior to 1955

- (12) Any extinguishers with 4B, 6B, 8B, 12B, and 16B fire ratings
- (13) Stored-pressure water extinguishers with fiberglass shells (pre-1976)"

Additionally, as referenced earlier in the article: "4.4.1 Dry chemical stored pressure extinguishers manufactured prior to October 1984 shall be removed from service at the next 6-year maintenance interval or the next hydro-test interval, whichever comes first."

FEMA's supports the requirement of the new NFPA 10 standard that any stored pressure (non-cartridge operated) fire extinguisher not conforming to the UL 299 standard, manufactured prior to October of 1984, be replaced. To continue to service extinguishers that do not conform to these standards serves no purpose except to reduce extinguisher effectiveness and safety in the hands of a novice, when seconds count. v

For more information about how to determine if a fire extinguisher should be replaced see the attached maintenance guide. To learn more about fire extinguishers and how to operate one, visit www.fireextinguisher.com, or for educational materials about these topics and other fire protection issues, contact FEMA at (216) 241-7333 or visit www.femalifesafety.org.

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