



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

AUG 30 2017

Mr. Ronald C. Mauney
Senior Product Design Engineer
Kidde Residential and Commercial Division
1016 Corporate Park Drive
Mebane, NC 27303

Reference No. 17-0052

Dear Mr. Mauney:

This letter is in response to your April 28, 2017, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to fire extinguishers. Specifically, you reference § 173.309(c)(4) of the HMR, which requires a fire extinguisher be tested, without evidence of failure or damage, to at least three times its charged pressure at 21 °C (70 °F) but not less than 825 kPa before initial shipment, and be marked to indicate the year of the test within 90 days of the actual date of the original test. You ask if this regulation intends for the testing stamp year to reflect the year the fire extinguisher was tested, as opposed to the year the cylinder was manufactured.

The intention of the testing requirement in § 173.309(c)(4) is to mark the cylinder with the year the fire extinguisher was tested and place the marking on the fire extinguisher within 90 days of the actual date of the original test. For example, if a cylinder was manufactured in 2015, subjected to testing in 2017, and thus put into use as a fire extinguisher; the stamp should be marked as 2017 within 90 days of such testing.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

T. Glenn Foster
Chief, Regulatory Review and Reinvention Branch
Standards and Rulemaking Division



Andrews
173.309
fire extinguishers
17-0052

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28-April-2017

To Whom It May Concern:

We are writing to obtain an interpretation of a provision contained within the Code of Federal Regulations, which states as follows:

(c) Non-Specification cylinders are authorized as fire extinguishers subject to the following conditions:

* * * * *

(4) Each fire extinguisher must be tested, without evidence of failure or damage, to at least three times its charged pressure at 21 °C (70 °F) but not less than 825 kPa (120 psig) before initial shipment, and must be marked to indicate the year of the test (within 90 days of the actual date of the original test) and with the words "MEETS DOT REQUIREMENTS." This marking is considered a certification that the fire extinguisher is manufactured in accordance with the requirements of this section. The words "This extinguisher meets all requirements of 49 CFR 173.306" may be displayed on fire extinguishers manufactured prior to January 1, 1976;

49 CFR § 173.309 (c)(4).

The purpose of this regulation is to insure the strength and integrity of the fire extinguisher cylinder prior to shipping through commerce. This is done through hydrostatic testing. The issue that requires clarification is what date stamp should appear on the product?

The regulation itself is not clear, and refers to testing and dating the "fire extinguisher" within 90 days of the actual date of the original hydrostatic test. Hydrostatic testing involves filling the cylinder with a liquid, usually water, and pressurization of the vessel to the specified test pressure. A finished fire extinguisher (vs. cylinder) which is a filled vessel, cannot be tested in this manner without discharging

its contents. Accordingly, the "letter" of the regulation cannot be followed, because it is the "cylinder" that is subject to hydrostatic testing – not the fire extinguisher itself.

Based upon these ambiguities, it appears that the drafters intended to have the hydrostatic testing performed within 90 days of final manufacture of the product. Accordingly, then, for older cylinders that have been hydrostatically tested and date stamped, the intent of the regulation would be satisfied by performing an additional hydrostatic test, completing assembly of the fire extinguisher, and marking the fire extinguisher with the new date stamp. By way of example, a 2015 cylinder could be subjected to a hydrostatic test in 2017, turned into a fire extinguisher, and the date stamp modified to reflect the accurate date of the test and assembly of the final product.

We would like clarity on this regulation, and appreciate your time and consideration.

Regards,



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