

THE UNIVERSITY of TENNESSEE 
INSTITUTE for PUBLIC SERVICE

MUNICIPAL TECHNICAL ADVISORY SERVICE

Chief Smokey Sparks
Anytown Fire Department
123 Main Street
Firesafe, Tennessee 12345-6789

June 19, 2013

Dear Chief Sparks,

You asked two specific questions concerning fire hose: first, are you required to replace fire hose if it reaches a certain age; and second, will the Insurance Services Office (ISO) give you credit for fire hose that is more than ten years old. To answer your question, we need to look at National Fire Protection Association (NFPA) Standard 1962, *Standard for the Care, Use, Inspection, Service Testing, and Replacement of Fire Hose, Couplings, Nozzles, and Fire Hose Appliances*, 2013 Edition, and the ISO Fire Suppression Rating Schedule (FSRS).

Fire hose has a limited life, and the length of time that a section of fire hose may be used with adequate reliability will vary according to many factors. The quality of the hose, the frequency of use, the care and maintenance it receives, the amount of degradation from ultraviolet light (sunlight and fluorescent lights: use a hose tarp/cover), and whether the hose receives abuse or physical damage all affect service life. Testing by the Fire Equipment Manufacturers Association indicates an increased risk of failure after ten years of use. Your fire hose testing and inspection records will help you evaluate how your fire hose performs over time and help you determine when to replace a section of hose.

The 2013 edition of NFPA 1962 has a requirement that calls for hose manufactured before July 1987 to be removed from service, as indicated below:

4.8.1 Hose manufactured prior to July 1987 to meet the requirements of the 1979 and previous editions of NFPA 1961, Standard on Fire Hose, shall be removed from service.

Even if this pre-July 1987 hose still passes an annual test, NFPA 1962 requires its removal from service. However, unless you have adopted NFPA 1962, the standard is not a *requirement*, but prudence and industry best practice supports its removal from service.

Chief Smokey Sparks
June 19, 2013
Page 2

Fire hose does not last forever, and a good fire administrator should plan for its eventual replacement through a program that predicts replacement years, estimated costs, and identifies the funding source for the replacement hose. NFPA 1962 addresses this in section 4.12, as copied below:

4.12 Fire Hose Replacement. Fire hose users and the authority having jurisdiction shall establish a replacement schedule for their fire hose that takes into consideration the use and age of the hose and testing results.

The age of the hose is one of the key factors that a fire chief must consider when evaluating fire hose for replacement. NFPA requires a fire department to have a replacement schedule, but stops short of establishing a maximum number of years of service, leaving that up to the authority having jurisdiction. Even though a section of 15-year old fire hose may still pass an annual test, the fire chief should consider a 10-year maximum service life under normal operating conditions.

Section 512C of the ISO FSRS addresses the testing of fire hose. For maximum points, the fire department must test all fire hose annually. The FSRS states:

The Hose Service Test Program shall be in accordance with the general criteria of NFPA 1962, *Standard for the Inspection, Care, and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose*.

The NFPA 1962 test pressures are a minimum of 300 psi for attack hose, and a minimum of 200 psi for supply hose. The FSRS is silent as to a maximum number of years of service, so as long as the fire hose passes an annual test, ISO will give the fire department credit for the hose.

Every fire department needs a sufficient amount of good, reliable fire hose for safe and efficient fire ground operations. NFPA 1962 is the industry standard for fire hose, and your department should follow NFPA 1962 recommendations to help provide and maintain dependable fire hose.

Sincerely,



Dennis Wolf
Fire Management Consultant
UT-MTAS