NATIONAL INTERAGENCY FIRE CENTER

3833 South Development Avenue
Boise, Idaho 83705

9216 NFES (LLFA240000)

February 12, 2010

NATIONAL FIRE EQUIPMENT SYSTEM
CACHE MEMORANDUM NO. 10-01

To: NFES: National Interagency Support Caches

From: Tory Henderson, Chair, Fire Equipment Working Team - NWCG

Subject: Hose Line Tee (NFES 0230) Inspection Requirement

The hose line tee with valve (NFES 0230) is a fitting consisting of male and female threaded ends with a male tee branch used for diverting water from a main trunk line to a lateral branch. The technical specifications for the hose line tee are described under FS Specification 5100-107.

Editions of this specification prior to 2005 did not include a minimum waterway diameter for the tee branch. As a result, the branch orifice diameters varied and were very different from one manufacturer to the next. In 2005, this problem was addressed in the most recent update to the specification, FS Specification 5100-107d. In the update, a minimum flow rate through the tee branch is specified for hose line tees with valves, as well as a minimum waterway diameter for both hose line tees with and without valves.

When the internal waterways of the hose line tee are less than 0.50 inch, the friction loss through the lateral is greatly increased, resulting in a reduction of pressure and flow at the nozzle of the lateral. **Hose line tees with waterways under 0.50 inch diameter provide unacceptable performance and should be removed from service.**

There are no readily apparent markings or other features that help facilitate quick identification of acceptable and unacceptable hose line tees. To determine whether or not to keep a hose line tee with valve manufactured before 2005, it will be necessary to measure the waterway diameter of the tee orifice. The following process will need to be applied to all NFES 0230 hose line tee inventory from all manufacturers:

Directions:

1. Using calipers or a tape measure, take a diameter measurement of the tee waterway from one inside wall to the opposite inside wall as shown in Example 1 below. A go no-go gauge using 0.50 inch diameter rod may also be used.

2. If the diameter measurement is smaller than 0.50 inches as shown in Example 2 below, then cull the hose line tee with valve from inventory.

Example 1: Keep in inventory

Example 2: Cull from inventory

There is no cost effective retrofit option for hoseline tees with undersized waterway diameters. Out of specification hose line tees should be disposed of in a way that ensures that they cannot accidentally re-enter the cache system, such as employing suitable destructive processes by disfiguring the threaded portions.

Please contact Sam Wu, SDTDC at 909-599-1267 extension 292 if you have questions or comments regarding the information in this memorandum.

/s/ Tory Henderson

cc:
State Fire Management Officers - BLM
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Technology Development Centers - San Dimas, Missoula
Agency Directors - NIFC
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