

Subject 401

May 5, 2017

SUMMARY OF TOPICS

The following changes in requirements to the Standard for Portable Spray Hose Nozzles for Fire-Protection Service, UL 401, are being proposed for preliminary review and comment only:

1. Inlet Pressure Ratings

2. Revisions to Clarify Requirements and Update Testing Details

STP BALLOTS AND ALL COMMENTS DUE: June 4, 2017

UL's goal is to have no interest category comprise more than one-third of the STP membership balance. To improve the current balance for STP 47, UL is looking for participants in all interest categories, except for General and Producer. Definitions for these interest categories are available on the Standards STP Internet site:

<http://ulstandards.ul.com/develop-standards/participation/interest-categories/>

If you are interested in applying for STP 47 membership or are aware of potential candidates for this STP, please contact the Mark Ramlochan, Mark.Ramlochan@ul.com.

For your convenience in review, proposed additions to existing requirements are shown underlined and proposed deletions are shown ~~lined-out~~.

1. Inlet Pressure Ratings

RATIONALE

Proposal submitted by: Kerry Bell, UL LLC

UL proposes to reduce the minimum rated inlet pressure from 200 psig to 175 psig. This proposed revision is intended to provide greater alignment with the Standard for the Installation of Standpipe and Hose Systems, NFPA 14 which permits pressure 175 psig pressure ratings for components.

PROPOSAL

6.6 Nozzles covered by these requirements shall have a rated inlet pressure of not less than 175 psig (~~1380~~ 1207 kPa).

26.1 Each spray nozzle shall not rupture, crack, or show signs of leakage through the body when subjected to a hydrostatic pressure of not less than twice the rated inlet pressure ~~400~~ psig maintained for not less than 15 seconds.

**UL COPYRIGHTED MATERIAL –
NOT AUTHORIZED FOR FURTHER REPRODUCTION OR
DISTRIBUTION WITHOUT PERMISSION FROM UL**

Documents
Document Sharing Hub

2. Revisions to Clarify Requirements and Update Testing Details

RATIONALE

Proposal submitted by: Kerry Bell, UL LLC

UL proposes to update and revise text throughout the standard to clarify requirements and update testing details. Some of the significant revisions include the following:

- a) Clarify the requirements for discharge calibration testing of basic spray nozzles.
- b) Clarification of the test methods and requirements associated with the testing of nozzles containing plastic parts.
- c) Clarification of the test methods and requirements for the High Temperature Test.
- d) Clarification of the test methods and requirements for the Test on Controls.
- e) Clarification of the marking requirements.

PROPOSAL

5.6 FLUSH/CLOGGING FEATURE – A feature in a nozzle that allows the orifice to be opened so that small debris (~~that-which~~ might otherwise be trapped in the nozzle causing pattern disruptions and flow variation) can pass through. When the flush feature is engaged, the nozzle pressure may drop and the pattern may deteriorate.

5.11 WIDE OPEN POSITION – Nozzle setting that generally provides for the maximum flow through the nozzle.

6.2 The outer ends of all internal threads defined as "American National Fire Hose Connection Screw Threads" (also known as NST and NSH) shall be terminated by the blunt start or "Higbee Cut" on the full thread to facilitate coupling and to avoid crossing and mutilation of thread.

7.4 A plastic material used to construct a nozzle or nozzle part shall comply with the Polymeric~~Nonmetallic~~ Nozzle Tests, Section 23.

Exception: A nozzle or nozzle part constructed of polytetrafluoroethylene shall not be required to comply with the Polymeric Nozzle Tests.

10 Discharge Calibration Test

10.1 When tested in accordance with 10.2 – 10.6, as applicable:

- a) A basic spray nozzle shall discharge (1) not less than the rated flow in at least one position within the range of adjustment and (2) not more than 10 percent above the rated flow in both the straight stream and wide angle spray pattern settings when tested at the rated operating pressure. See 10.3.