

FIRE HOSE TESTING STANDARD OPERATING GUIDELINE

DATE APPROVED: SEPTEMBER 2007

I. Scope

This standard regulates the acceptance of new sections of fire hose and establishes procedures for conducting the annual service tests.

II. Test-Procedure

- A. Prior to testing, each section of hose shall be subjected to a physical inspection to determine whether it is free of debris, and damage from chemicals, burns, cuts, and abrasion. Any section of hose that fails the physical inspection shall immediately be placed out of service.
- B. Hose shall be tested by using the pump of an engine or hose tester. The test area shall be relatively flat and free of any objects that might damage the hose.
- C. The service test for hose of less than five inches in diameter shall be conducted as follows:
 1. Connect the hose to a discharge. Hose shall not be attached to any discharge at or adjacent to the pump operator's position.
 2. The total length of any hose-line in the test layout shall not exceed 300 feet, except for LDH. Hose-lines shall be straight and without kinks. Hose that has been repaired or re-coupled shall be tested one section at a time.
 3. Connect the engine to a hydrant or hose tester to a water supply.
 4. Connect a nozzle or shutoff device to the end of the hose. The appliance should be secured to prevent an uncontrolled reaction in the event of a hose rupture.
 5. Fill the hose-line to be tested with water and bleed off all air.
 6. Close the nozzle and increase the pressure to 50 psi. Check for leakage. Tighten couplings as necessary. Mark the location of the couplings with a suitable marker.
 7. Clear the area and increase the pressure slowly until the pressure reaches 300 psi for a service test or 400 psi for an acceptance test if manufactured prior to July 1987. Hose manufactured after July 1987 shall be tested to the pressure marked on the hose jacket. Hold for five minutes. Inspect for leaks or damage. Remember: Never straddle a hose-line! Consult NFPA 1962, *Standard for the Care, Use, and Service Testing of Fire Hose Including Couplings and Nozzles*, if you have any questions about this.
 8. Bleed off pressure.

- 9. Record the test date, etc., on the permanent hose record.
- 10. Hose that fails the test by bursting or leaking or because of coupling failure due to slippage or leakage shall be tagged and placed out of service.
- 11. After the test, if needed, all hose shall be cleaned, drained, and dried before being placed in service or storage.
- D. Tests for five-inch supply line and sections of soft suction hose shall follow the same procedure outlined in Item C above; except that the service test pressure shall be 200 psi and the acceptance test pressure shall be 300 psi. Ensure that the hose is service tested while lying flat.
- E. Booster hose shall be tested to check for leakage at normal working pressure.
- F. Nozzles and other appliances shall also be inspected during the annual fire hose service test to ensure that the nozzles and appliances are undamaged, clear of obstructions, and fully operational. Any nozzle or appliance found to be in disrepair shall be red-tagged, removed from service, and sent for repair.

III. Responsibilities

- A. The Fire Chief shall be responsible for:
 - 1. Ensuring that all new sections of fire hose purchased by the department are designed and constructed in accordance with the provisions of NFPA 1961, *Standard on Fire Hose*.
 - 2. Conduct an acceptance test on each section of fire hose before it is placed in the hose inventory. The test shall comply with the provisions of NFPA 1962, *Standard for the Care, Use, and Service Testing of Fire Hose Including Couplings and Nozzles*.
 - 3. Schedule and supervise the annual service test. Every section of fire hose in the department's inventory shall be tested in accordance with NFPA 1962.
 - 4. Conduct a service test after a section of hose has been repaired.

Quick Reference Chart

Hose	Service test pressure	Time to hold
1" forestry hose, 1 3/4", 2 1/2", & 3"	300 psi	5 min