

Falmouth Fire-EMS Operating Guideline

Hose Testing

Objective:

To provide instructions for procedures to be used when performing a Hose Service Test. A Hose Service Test is distinguished from an acceptance test as the Service Test is done annually on every active length of hose within the department.

Guidelines:

- 1) A portable hose test machine shall be used for all in-house hose service tests. The hose test machine can be connected to a fire hydrant or a fire engine pump. The hydrant or engine is used only to supply the water for the testing. The small pump on the hose test machine will be used to increase pressure in the hoses being tested. An operator shall stay at the hose test machine throughout the test.
- 2) All hose will be tested annually and shall be tested to the manufacturer's recommended pressures and time.
- 2) A hose line, equipped with a shut off device for bleeding air at the free end of the hose, shall be connected to each hose test gate valve. No hose line shall exceed 300 feet in length.
- 3) With the hose test gate valve in the full open position, each line shall gradually be filled with water and have all air purged.
- 4) The hose test gate valve shall be moved to the restricted flow position.
- 5) The pressure on the lines shall be raised to the manufacturer's recommended pressure.
- 6) The hose shall be checked for leaks at the couplings and tightened with spanners where necessary.
- 7) All people shall move a safe distance from the test area prior to increasing pressures. At least one person shall be positioned to signal the hose test machine operator if an immediate shut down is necessary.
- 8) Typically, hose of 3" or less diameter shall be raised to a pressure of 250 psi and maintained at that level for 5 minutes. Hose of greater than 3" diameter shall be raised to a pressure of 200 psi and maintained at that level for 5 minutes.

- 9) While the test layout is at service test pressure, the hose shall be inspected for leaks. Whenever possible, the inspecting personnel shall be at least 15 feet to the side of the hose. Personnel shall never stand in front of the free end of the hose or straddle the hose.
- 10) If during the test, a leak or burst occurs, replace the failing section of hose and start the test over. It will be necessary to purge the line of air again.
- 11) After the test period, reduce the pressure, shut down the hose test machine discharge, relieve pressure on the hose and check the couplings for signs of coupling slippage. If the coupling has slipped, the hose has failed the test.
- 12) Record the numbers of all the hose for which a test was attempted, on the "Hose Test Record Sheet". Numbers for hose passing the test shall be recorded in the test section. Numbers for hose that has failed shall be recorded in the failed section only. The reason for failing the test shall be recorded on the back of the "Hose Test/Repair Record" sheet. Both ends of the hose shall be compared for the same number.
- 13) All hose that passes the test may be put back onto the apparatus or placed back in storage. All failing hose shall be marked and placed out of service.
- 14) All completed "Hose Test/Repair Record sheets shall be forwarded to the Assistant Fire Chief
- 15) The Assistant Fire Chief shall maintain a log of hose testing performed annually.
- 16) A private company may be used for hose testing. They will follow the same guidelines for manufacturers recommendations on testing and will provide the Assistant Fire Chief with the results of the tests.

These guidelines may be changed or altered by the Fire Chief at any time.