# Hurricane Fire & Rescue

**Hurricane, WV**

**Administrative Guidelines**

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| **Subject** | Hose Testing |
| **Guideline Number** | 800.505 |
| **Adopted** | March 1, 2007 |
| **Effective Date** | April 7, 2007 |
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**Purpose:** To insure a consistent marking, maintenance, and testing guideline for all department hose.

**Scope:** All hose.

**Responsibility:** All personnel.

## MARKING/INVENTORY

A number will be assigned to each section of hose and will be marked on the hose next to the female coupling of each section of hose. 5" hose will be marked on one end.

## TESTING

A. Hose will be tested annually per NFPA.

B. All new hose will be marked for inventory control prior to being placed in service.

C. Hose, which has been damaged or repaired will be tested and documented prior to being placed back in service.

D. Prior to testing, hose length should be examined for jacket defects, coupling damage, and worn or defective gaskets. If defects cannot be corrected, hose should be placed out of service.

E. The test site will have adequate room to lay hose out straight, free of kinks or twists. It should be isolated from traffic, and free of dirt and debris.

F. Connect lengths of hose to be tested to hose tester or engine being used. Lengths of hose are to be no longer than 300 feet. Tighten

connections between each section if needed to stop water leaks. Make a mark on the hose jackets against each coupling completely around the coupling.

G. Hose that has been repaired or re-coupled will be tested one section at a time.

H. Attach a nozzle to each test length of hose, to permit the purging of air and draining of water following test.

I. Open the nozzle to allow all air to escape as hose is filling. Discharge water away from test area.

J. Close the nozzle after all air has been purged from each test length. Check that all hose is free of kinks and twists.

K. All personnel other than those persons required to perform the remainder of the procedure will stay clear of the hose being tested.

L. Increase the pressure to the required test pressure (1 ½", 1 ¾", 2 ½", and 3" double jacket hose @ 250 psi, 5" – 5"@ 200 psi) personnel should closely monitor the hose for indications of failure the pressure increases. Maintain the test pressure for 5 minutes.

M. After 5 minutes at the service test pressure, the pump will be shut down, the pressure allowed to equalize with the source, the pump discharge gates closed, and each nozzle valve opened to drain the test hose.

N. Observe coupling markings for change. Tag all sections that have coupling changes during test or have a leak. A 1/16" to 1/8" uniformed movement of coupling on newly coupled hose is to be expected. This slippage should not occur during subsequent tests.

O. Record the test results for each section of hose.

P. Record keeping will be logged on the Hose Record form by the personnel responsible for that specific test, repair, etc.

Q. After completing the hose test, record forms should be forwarded for entry into the computer system.

## SAFETY

A. Open and close all valves slowly to prevent water hammer in the hose and the pump.

B. Care should be taken to remove all air from the hose before the nozzle is closed and the pressure is raised. All personnel should be away from the immediate area prior to raising the pressure. The development of test pressures, introduces a serious accident potential if air remains in the system.

C. If the inspecting personnel walk the test layout to inspect for leaks, they should be at least 15 feet to the left side of the nearest hose line in the test layout. The left side of the hose line will be defined as the side that is to the left when facing the free end from the pressure source. Personnel should never stand in front of the free end of the hose, or to the right side or closer than 15 feet to the left side, or straddle the hose during the test.

D. If, during the test, a section of hose is leaking or a section bursts, the pressure to that test hose will be disconnected. Following the completion of the test for the remaining test lengths the damaged hose will be drained and removed from the test layout and tagged. The remaining intact sections of hose will be retested.

E. All personnel will remain alert at all times for any possible hazards.

F. Appropriate PPE for hose testing will consist of helmet and gloves.