

Nokomis Fire Department		
Date	Directive	Number
May 2, 2019	#2	#216
	Category	
	R.O.G	
Hose Testing Procedure		

### **Purpose:**

To establish a Standard Operating Procedure by which hose testing will be conducted by Nokomis Fire Department personnel.

## **Background:**

This Department on an annual and as needed basis conducts hose testing. This procedure is to insure that all departmental fire hose is tested in a uniform manner.

#### **Procedure:**

*Caution:* Failure to follow the following procedure may result in equipment damage, personal injury, or death. Personal Protective Equipment including; helmet, gloves and boots shall be worn at all times during the following procedures.

# **General Inspection**

- 1. Inspect all hose for missing or defective gaskets, jacket damage or defect, and coupling damage. Correct any problems prior to continuing the test.
- 2. Re-mark any faded hose I.D. numbers using a black permanent marker at both ends. Stations with 1" booster line will mark and track hose using Apparatus I.D. number.
- 3. When at all possible hose rack in unit's station should be tested first to facilitate replacement of hose on units.

#### **Service Test Procedure**

A. Hose should be tested at a maximum length of 300'. B. Hose test pressures are as follows:

- - 1" rubber booster line at 250 psi
- - 1 1/2 thru 3" at 250 psi
- - 4" and 5" at 150 psi

C. Any hose lengths being tested simultaneously shall have the same service test pressure.

- 4. Hose test layouts shall be straight without kinks or twists.
- 5. The layout to be tested shall be attached to the Engine discharge. Hoses will be secured using a hose rope at a point 10 to 15" from pump discharge coupling with a nozzle or other shut-off device attached to other end.
- 6. With discharge valves and shut-off devices open pressure should be gradually brought up to approx. 50 psi.
- 7. After layout is full of water air should be exhausted from system by raising shut-off device above highest point in system. Shut-off device should be closed slowly and discharge valve should be gated down when possible to reduce reaction in the event a hose bursts during testing.
- 8. After reaching this pressure (50 psi) all couplings shall be checked for leakage and tightened with spanner wrenches when necessary. Each hose shall then be marked at the back of each coupling with a black permanent marker for slip test.
- 9. The pressure shall be raised slowly to the service test pressure and held for five minutes.
- 10. While the test layout is at service test pressures the hose shall be inspected for leaks. If a section of hose is leaking or bursts the test shall be terminated and defective piece removed before attempting to continue the test.
- 11. After 5 minutes shut down pressure and open hose shut-off device to drain layout. The marks made at backside of coupling should be checked for coupling slippage if coupling has slipped hose has failed test.
- 12. Clearly mark all leaks found in each section with a permanent black marker roll hose male coupling out and including a DETAILED description of problems found. *Example: Hose leaking 10' from male coupling. Hose should be repaired.*

All hose tested shall be recorded on Fire Hose Use/Testing Reporting Form.