HALIFAX FIRE DEPARTMENT SOG 29	HOSE TESTING
PAGE 1 OF 2	ISSUED: September 20, 2012 REVISED:

**29.0 Purpose:** Guideline for testing hose.

**29.1 Scope:** Pressure testing hose must be conducted safely and documented, carefully following a set of prescribed Guidelines. Testing hose is dangerous and must be done only if proper Guidelines and equipment are used! The following Guidelines must be followed in order to accomplish a safe and effective testing operation. Reference for hose testing can found in NFPA 1961 and 1962.

## 29.2 General Guideline

- A. Inspect all hose and couplings for physical damage before pressure testing. Any hose lengths with defects or damage must be repaired or taken out of service before testing. A black mark shall be placed on the hose at the coupling to track if the hose has pulled away from the coupling during test.
- B. The hose line to be tested must be laid flat and straight (without kinks or twists).
- C. The total length of hose line under test must not exceed 300 feet.
- D. All air must be removed from the hose line to be tested. This is done by slowly charging the line with an open nozzle or test cap on the discharge end of the line and an open test gate valve on the pump discharge. Then gradually increase pressure to about 40 psi, with all air removed, slowly close the nozzle or test cap valve and then close the test gate.
- E. The pressure must be raised slowly (at a rate not to exceed 15 psi per second) to the specified test pressure (see table next page) and held for not more than 5 minutes, in service pressure test.(not more than one minute in new hose acceptance pressure tests; see note #2) Personnel inspecting the pressurized hose line should do so from a distance of at least 15 feet from the hose.

F. After inspecting the hose, the pressure must be reduced slowly to zero psi, and then the valves on both ends opened, to drain the hose.

Large diameter hose can be tested by Engine 2, ensure circulation of water while performing test.

## TABLE OF TEST PRESSURES FOR HOSE

## **Service Test**

**Diameter**1 ½" to 2 ½"
3" to 4"

**Pressure** 250 psi for 5 minutes 200 psi for 5 minutes

## Criteria for hose fitness.

Hose shall be taken out of service if the one or more of the following criteria is met. Hose that is questionable shall be placed aside for further review by the Chief.

- Ruptures during test
- Couplings are damaged and hose cannot coupled.
- · Hose has pulled away from coupling
- Hose has ballooned and hose has lost its symmetry.
- Hose has steady significant leak from jacket
- 4" with pinhole leaks are to remain in service