



<b>Wintergreen Fire and Rescue Standard Administrative Policy</b>	
Subject:	Hose Testing
Reference Number:	FIRE 02-013
Effective Date:	28-May-15
Last Revision Date:	19-Feb-22
Signature of Approval	Curtis Sheets, Chief

**Purpose:**

The purpose of this SOG is to create a uniform procedure for service testing fire hose and nozzles.

**Policy:**

Service tests on all fire hose shall be conducted annually in the 2<sup>nd</sup> quarter of the year as assigned by the Deputy Chief.

**Procedure:**

Testing shall be completed at the perspective station with the following procedure.

- Assure all personnel are wearing proper PPE to include but not limited to structure helmet, eye protection, and proper work gloves
- The total length of any hose line in the hose test layout to the service-tested shall not exceed 300 ft.
- All hose being tested shall be inspected for defects prior to charging.
- Record identifying numbers of the hose tested so that they can be entered into Fire Bridge later.
- Properly connect hose to the pump to be tested from and attach gated valves, end caps, or nozzles to the opposite end of the hose as required.
- Charge the line(s) with 50psi of water. Clear the air from the line and close the gate valve(s).
- Check all couplings for tightness.
- Revised 5/19/15 Attack hose manufactured after 1987 shall be tested by raising the pressure slowly to 300 psi (or a pressure not to exceed the service test pressure marked on the hose) for 3 minutes.
  - Attack hose prior to 1987 shall be tested by raising the pressure slowly to the service test pressure that is stamped on the hose or 250psi and held for five minutes.
- Single jacketed or forestry hose will be tested at 150 psi (or a pressure not to exceed the service test pressure marked on the hose).
- Supply hose shall be tested at 200 psi (or a pressure not to exceed the service test pressure marked on the hose).
- All personnel, with the exception of the pump operator, should keep a distance of at least 50 feet from the hose while it is under pressure.

- When the test is complete, reduce engine to idling speed; close water source; disengage pump; and open nozzle slowly to relieve pressure, then close gates and disconnect hose lines.
- While testing the hose, all nozzles (smooth & fog) should be flow tested using the Pitot Gauge located in the Deputy Chief's office to assure they are delivering appropriate PSI. With the shutoff fully open, the inlet pressure shall be adjusted to the rated pressure,  $\pm 2$  percent.
  - Constant and select gallonage spray nozzles shall flow no less than the rated flow at the rated pressure and no more than 10 percent over the rated flow at the rated pressure when tested at each predetermined flow selection.
  - The flow shall be increased to the minimum rated flow, and the pressure at that flow shall be recorded.
  - The flow rate shall continue to be slowly increased to the maximum rated flow, and the minimum and maximum pressures throughout the flow range shall be recorded.
  - Constant pressure (automatic) spray nozzles shall maintain their rated pressure  $\pm 15$  psi throughout the rated flow range.
  - The valve or shutoff and the pattern adjustment shall be operated through their full range of motion at 100 psi and shall exhibit no signs of leakage, binding, or other problems.
  - If the nozzle does not meet any of the above test requirements, it shall be removed from service, repaired, and retested upon completion of repair.
- Properly drain all wet hose and hang in the hose tower, if applicable. It is the responsibility of the shift that tested the hose to assure it is rolled and returned to its proper location.
- If a hose leaks or the hose jacket fails inspection, a distinguishing mark noting the location of the defect(s) shall be placed on the hose. It is acceptable to mark these locations with a circle using a permanent black marker.
- If the coupling(s) fail or are defective, they shall be repaired or replaced.
- If a defective hose is discovered the hose shall be removed from service and clearly marked out-of-service. If the hose cannot be repaired, the couplings shall be removed from both ends. A trouble ticket shall be completed prior to the end of the shift the hose was tested.
- Hose records shall be updated in Google Docs by Lieutenant/Captain of the shift that tested the hose.

As of March 2022, Wintergreen Fire Department has entered into an agreement with Waterway Inc. to test our hose, nozzles, appliances, and pumps.