HOSE TO BE TESTED

* All fire hose shall be pressure tested annually (4.1.2)
* Hose **manufactured prior to July 1987** shall be removed from service (4.8.1)

SERVICE TEST PRESSURE (4.8.2)

* Attack hose (1” to 2 1/2”), a minimum of 300 psi, but no more than the Service Test Pressure marked on the hose jacket **[MCFRS normally use 400psi]** (4.8.2.1)
* Supply hose, (3” to 6”), a minimum of 200 psi, but no more than the Service Test Pressure marked on the hose jacket **[MCFRS normally use 300psi]** (4.8.2.2)

VISUAL INSPECTION (4.5)

* Inspect all couplings to insure that gaskets are in place, female swivels rotate freely, and there are no signs of coupling slippage
* Inspect hose for jacket tears, burn spots, cuts, severe abrasion, mildew, rot, unusual lumps, bulges, delamination of the lining, or twists (4.5.4 and 4.8.4.2)
* Any hose showing unusual wear or signs of coupling slippage shall be removed from service (7.1.3)
* Rewrite the serial number with a paint pen in all locations along the length of hose where needed
* Record the details of each hose section

TEST LAYOUT

* The maximum length for hose service test layout is 300 feet (4.8.4.4)
* Hose to be tested must lie flat, straight, and level as possible
* Connections should be hand tight
* Attach a nozzle, or test cap with bleeder valve, to the end of the hose layout
* To bleed air, the nozzle end should be raised slightly above the highest point in the layout (4.8.5.2.4)
* Secure the free end of the layout to prevent whipping or uncontrolled movement of the hose if it bursts (4.8.5.2.7)

PRESSURE TEST (4.8.5 Hose testing machine or 4.8.6 Pump on apparatus)

* Ensure that the nozzle is closed.
* The proper gate shall be "cracked" open to fill the hose to a maximum of 50 psi during the initial tests
* **Open the nozzle until all air is expelled** (4.8.5.2.4)
* Visually inspect the test layout for any signs of leaks, bulging, or coupling slippage
* If leaks are detected,
  + Tighten the coupling once by using spanner wrenches
  + If the leak continues, the gasket will be replaced
  + If the coupling continues to leak, the affected hose length "failed"
* Circle each coupling with chalk or felt pen where the jacket meets the coupling shank, so slippage can be detected after testing
* **All personnel** must remain at least 15 feet to the left of the test layout until the test is completed. \*\*\*Personnel entering the testing area to inspect hose for leaking must be wearing helmets, with face shields down
* Slowly increase the pump pressure to the service test pressure
* Allow to pressure to stabilize up to 1 minute per 100’ of hose in the layout, boosting pressure as necessary to maintain test pressure
* Close the discharge gate(s)
* Maintain the service test pressure for three (3) minutes
* Inspect the hose for leaks while under pressure – ***remain 15 feet to the left of the hose layout*** *(when facing the free end of the hose)*
* If leaks appear, or suspicion develops that hose may be approaching failure, discontinue the test, remove the section, then restart the test from the beginning
* After 3 minutes at the service test pressure, without leaks or loss of pressure, open the nozzle or test cap valves to drain the test layout

**FAILURE POINTS** (Remove from service, manage as noted below) (4.8.4.10)

* Manufactured prior to 1987
* Jacket tears
* Burn spots
* Cuts
* Severe abrasion
* Mildew
* Rot
* Unusual lumps
* Bulges
* Chemical damage
* Delamination of the lining
* Twists
* Unusual wear
* Signs of coupling slippage
* Leak under pressure

MANAGEMENT OF OUT OF SERVICE HOSE

* Place a knot in out of service hose (if possible)
* Note on the hose testing log how the hose failed, as well as on a tag attached to the hose
* When appropriate (cuts, leaks, other damage), mark directly on the jacket to identify the location of the failure
* Set failed sections aside in the designated area for out of service hose.
* The Station Commander or designee will arrange to return out of service hose to the MCFRS Tools, Hose, Equipment, and Appliances (THEA) Section for repair or disposal