ABINGTON TOWNSHIP FIRE DEPARTMENT

OG - 700-103

Guideline for Use of Sprinkler System Training Prop

1.0 PURPOSE

This guideline shall serve as an overview for utilizing the Automatic Sprinkler System Prop at the Abington Township Fire Training Facility.

Located within the "non burn room of the 2007 addition" is a complete sprinkler system training prop. This prop serves as a static display of all typical system components, but can also be arranged as a fully functioning sprinkler system.

2.0 RESPONSIBILITY

The responsibility to ensure that the above actions are taken in an appropriate manner is defined as indicated below:

2.1 Company Members (CM)
2.2 Company Officers (CO)

3.0 PROCEDURE

3.1 General

Basic training curriculum objectives for a new firefighter will call for the identification of various components of a sprinkler system. This includes sprinkler heads, sprinkler piping, sprinkler risers and control valves.

3.2 The sprinkler prop includes the following:

Upright Sprinkler	Head Pendent Sprinkler	Head Sidewall Sprinkler Head
Inspectors Test Valve	Sprinkler Branch Line	Sprinkler Riser
Water Motor Gong	Main Drain	Alarm Check Valve
Dry Pipe Valve	O S & Y Valve	Butterfly Valve
Post Indicator Valve	Wall Indicator Valve	Fire Department Connection

3.3 In addition to the static display of various system components, the prop can be arranged as a fully functioning system.

3.3.1 When this is to be accomplished, stretch an 1½" hose from the fire hydrant to the system connection. This **replicates or simulates** the underground water main for the building sprinkler system.

3.3.2 When the hydrant is turned on, the system pressure shown on the gauge simulates the water main pressure for the sprinkler system

3.3.3 If sprinkler heads on the branch lines are already fused, replace the fused head with a non-fused head prior to use.

3.3.4 Spare sprinkler heads are within the Sprinkler Head Cabinets on the wall.

3.3.5 With the Main Drain valve closed and the Main Control valve open, water can be moved through the system by opening the Inspectors Test valve. This will replicate a single sprinkler head being fused, allowing water to flow through the system and sounding the Water Motor alarm. You can also now fuse a sprinkler head – thus demonstrating the water flow from a sprinkler head.

3.4 For a more advanced training exercise or evolution, set up the sprinkler system prop for use and fill the building with cold smoke. Fuse a sprinkler head allowing the Water Motor gong to sound. Have an engine crew respond to the building for an AFA response and report light smoke showing from the structure. Have the engine company crew go in service, simulating a fire in a sprinkler building. Some operating objectives with this exercise can be gained by reviewing the example operating guidelines below for use in response to Sprinkler Systems and Fire Department Connections for Sprinkler Systems.

3.5 Sprinkler System Fire Department Connections (FDC)

3.5.1 One of the first arriving engines will stage at the fire department connection.

3.5.2 The driver of the apparatus will be cognizant of the location of nearby fire hydrants in relation to the FDC.

3.5.3 If instructed to connect to the FDC by the OIC, the driver shall stretch 3" hose to such and make connection. Check for, and remove any debris or objects in the FDC. Use caution while doing this for any sharp objects, etc.

3.5.4 The driver shall be aware of the area hydrants to ascertain if this will be a stand alone operation or if an additional engine will be needed.

3.5.5 Prepare to back the engine up with a public water supply.

3.5.6 The OIC shall give the order to pressurize the FDC. If instructed to pressurize the FDC, the pump operator shall initially pressurize the FDC with tank water.

3.5.7 Once you have established that you are indeed flowing into the system, then back yourself up with public water.

3.5.8 The system should be pressurized to 125-150 psi.

3.5.8.1 Under no circumstances should the pressure being supplied to the FDC exceed 175 psi.

3.5.8.2 Sprinkler systems are designed for a maximum working pressure of 175 psi. A serious impairment could result to the sprinkler system in the building if pressures exceed 175 psi.

3.5.9 Under certain circumstances, of which judgment should be used, a second 3" hose will be connected to the FDC.

4.0 **RECORDS**

4.1 Activity Usage Form

Located on the desk within the Accessory Building is an Activity Usage Form. This form is to be completed each time the Sprinkler System Training Prop is used. This will aid in maintaining the system as well as recognizing when supplies are running low.