

## APPENDIX A

### JURISDICTIONAL HOSE LINE COMPLIMENTS

#### **FAIRFAX COUNTY**

- D.1 Hose Line Options with Corresponding GPM Flows in **Fairfax County**.
- D.1.1 1 ¾-inch hose with Akron Turbojet Adjustable-flow Breakaway Nozzles
  - D.1.1.1 Standard nozzle setting will be 150 GPM @ 100 PSI nozzle pressure in the straight stream position. The engine officer has the option of varying from these settings if the need arises. This nozzle allows the quick exchange to the 15/16-inch smooth bore tip providing a 185 GPM flow @ 50 PSI nozzle pressure. This size line would normally be appropriate for use in occupancies where the fire areas are separated by walls and hallways. The advancement of these hand lines will be room to room.
  - D.1.2 2 ½-inch Hose with the Stacked Tip Smooth Bore Nozzle.
    - D.1.2.1 The standard tip size is 1 1/8-inch, which delivers 265 GPM @ 50 PSI nozzle pressure.
    - D.1.2.2 The second tip size is 1 ¼-inch providing 325 GPM @ 50 PSI nozzle pressure.
    - D.1.2.3 Removing the 1 ¼-inch tip provides a standard 1 ½-inch tip that allows the extension of a 1 ¾-inch line from the 2 ½-inch breakaway nozzle. This adds flexibility and mobility after the larger volume of fire has been darkened. This size line would normally be appropriate for use in occupancies with heavy fire conditions in large open spaces such as is found in warehouses, strip shopping centers, and other commercial establishments. If it is used as an interior line, adding a second engine company crew to assist with the deployment would be appropriate. Additionally, this line offers greater reach and penetration than the smaller hand lines.
  - D.1.3 Portable Master Stream Device.
    - D.1.3.1 These appliances shall be supplied with a minimum of two 3-inch lines.
    - D.1.3.2 Maximum flow of 1000 GPM should be no farther than 400 feet from the engine, 800 GPM not more than 600 feet away, and 600 GPM not more than 800 feet from the engine. The maximum effective reach will be approximately 100 feet from the appliance.
  - D.1.4 Leader Line – 400 feet.
    - D.1.4.1 These lines shall contain 200 feet of 2 ½-inch hose gated down to 200 feet of 1 ¾-inch hose with the Turbojet nozzle. The standard flow will be 150 GPM. This allows an additional 200 feet of 1 ¾-inch line

flowing 150 GPM to be deployed from the gated wye. The total flow in this situation is 300 GPM. Two or three lengths of 1 ¾-inch hose should be carried to the wye and connected to act as the back-up line. This can be accomplished by a second engine company.

D.1.5 Standpipe Pack.

D.1.5.1 Standpipe packs consist of a bundle of 100 feet of 2 ½-inch hose and a separate bundle of 100 feet of 1 ¾-inch hose. The packs are equipped with a 15/16-inch smooth bore nozzle for 1 ¾-inch hose and an 1 1/8-inch smooth bore for use on 2 ½-inch hose lines. The pack also has an Elkhart "Chief" low-pressure fog nozzle that is designed to deliver 200 GPM @ 75 PSI nozzle pressure.

D.1.5.2 The standpipe packs are designed for flexibility. One engine company can deploy a 200-foot line that consists of 100 feet of 2 ½ and 100 feet of 1 ¾ hose. Two engine crews can combine their packs in order to assemble and operate a 200 foot 2 ½ line.

D.1.5.3 If 1 ¾-inch hose is being used with the 15/16-inch nozzle, the nozzle pressure can be increased to 65 PSI, which will deliver a flow of 210 GPM at the nozzle.

D.1.5.4 An accessory bag accompanies the standpipe pack that contains a pressure gage, spanner wrench, standpipe wheel, pipe wrench, and spare nozzle.