

SOUTH PORTLAND FIRE DEPARTMENT

STANDARD OPERATING GUIDELINES

SOG #:	6.225	Effective Date:	4/26/2004
Title:	Handline Nozzles	# of pages:	2
Category:	Fire Ground Operations	Classification:	Yellow

1. **PURPOSE:** To establish standards for type, location and use of handline nozzles.
2. **PROCEDURES: Nozzle types & locations:** All nozzles in use by the SPFD shall be of the type and locations as specified by this SOG. Exceptions are:
 - When using replacement apparatus, a company may elect to replace that unit's nozzles with their own, according to the standard placement.
 - When nozzles are out of service or lost, a replacement nozzle, when available, shall be put into service. This replacement nozzle shall be as close as possible in performance and operation as the standard nozzle.

Booster hose nozzles

- All booster hoses shall be equipped with a ball valve shutoff fog nozzle. Spare fog and /or solid bore nozzles may be carried as available.

1 ¾ " hose nozzles

Pre-connects:

- All 200' 1 ¾ " pre-connects on permanent apparatus shall be equipped with Akron Low Pressure Turbojet fog nozzles. Low Pressure Turbojets shall be set to 125 gpm when on the apparatus.
- All 200' preconnects on Call Company engines shall be equipped with Akronmatic fog nozzles set to 100 gpm when on the apparatus.
- All 200' preconnects on reserve engines shall be equipped with fog nozzles capable of flowing at least 120 gpm at 100 psi nozzle pressure.
- Bumper lines, car packs or similar preconnects of less than 200' shall have fog nozzles capable of at least 120 gpm at 100 psi nozzle pressure.

Standpipe / High rise nozzles:

- The standpipe nozzle shall be of break apart design consisting of a 1 ½ " ball valve shut off with attached 7/8" straight tip. Attached to this tip is either a 200 GPM @75 psi Assault fog tip (preferred) or an Imperial 120/240 GPM fog tip. Imperial fog tips shall be left in the 240 gpm setting while stored. Note: The reserve engine and E-2 are not equipped with standpipe packs.
- Due to poor flow at low pressures, Akron Akronmatic or TFT nozzles are not acceptable on standpipe packs. Any other fog nozzle capable of flowing at least 120 gpm at 100 psi is considered more appropriate.

Spare nozzles:

- Each engine shall be equipped with a minimum of one (1) additional 1 ¾" handline nozzle. The spare nozzles on E-5 & E-8 shall be the same as the preconnect nozzle. All other spare nozzles shall be a ball valve shutoff fog nozzle capable of delivering a minimum of 120 gpm at 100 psi nozzle pressure.

2 ½ " hose nozzles

Fog nozzles

- Nozzles attached to 2 ½" crosslays shall be fog nozzles capable of at least 250 gpm flow at 100 psi. Engines without crosslays shall have fog nozzles on the rear 2 ½" hose beds. SQ-4, E-5 & E-8 shall have Akron Turbojet 120-150-200-250 gpm nozzles, E-1 & E-3 shall be the same or playpipe fog nozzles capable of flowing at least 240 gpm at 100 psi nozzle pressure. E-2 & E-6 shall have Elkhart SM 30F nozzles w/ playpipe adaptors. Reserve engines shall have playpipe fog nozzles capable of flowing at least 240 gpm @ 100 psi.

Solid bore nozzles:

- Each front line engine, with the exception of SQ-4, shall also be equipped with a minimum of one (1) additional 2 ½ " playpipe nozzle fitted with a 1 1/8 " or 1 ¼ " solid bore tip. This nozzle may be attached to a rear 2 ½" bed if the engine has a 2 ½" cross lay or stored depending on apparatus capability. SQ-4 is equipped with a break apart nozzle with a 1 ¼" smoothbore and does not have a second nozzle.

Replacement of Nozzles

Over time nozzles may be replaced with newer nozzles. At that time replaced nozzles will be "bumped" down the line, either on that apparatus or others, as determined by the Chief of the Department. Standards to guide this movement are as follows:

- 1 3/4" Preconnects equipped with selectable gallonage fog nozzles capable of flowing 200 gpm. Standpipe packs equipped with break apart nozzles with solid bore inserts and high flow fog tips.
- Primary 2 ½ " lines equipped with fog nozzles capable of at least 250 gpm flow.
- Each engine equipped with a solid bore 2 ½ " nozzle capable of flowing at least 250 gpm at 50 psi.

Due to poor flow at low pressures, Akron Akronmatic & TFT nozzles are not acceptable on standpipe packs. Any other fog nozzle capable of flowing at least 120 gpm at 100 psi is considered more appropriate.

Foam nozzles

Fog nozzle adaptors

- E-5 & E-8 shall each have two (2) foam tubes designed to attach to the primary 1 ¾" preconnect nozzles in order to flow aerated foam.
- E-1, E-3 & SQ-4 shall each have one (1) foam tube designed to attach to the primary 1 ¾" preconnect nozzles in order to flow aerated foam.
- E-2 & E-6 shall each have three (3) foam tubes designed to attach to the primary 1 ¾" preconnect nozzles in order to flow aerated foam. In addition, E-2 & E-6 shall each have one (1) foam tube designed to fit the SM 30F nozzle.

Dedicated Foam Nozzles

- E-2, E-5, E-6 & E-8 shall also be equipped with various foam only nozzles including master stream nozzles.

3. REFERENCES:

- None

By Order Of:

Kevin W Guimond

Kevin W. Guimond
Fire Chief