

MCESD#9 Pump Guidelines

1-3/4" – 200 ft. Preconnect

160 psi

2-1/2" – 200 ft. Preconnect

124 psi

Nozzle Pressures

Fog nozzle	100 psi
Smooth Bore	50 psi Handline
	80 psi Master Stream

Nozzle Discharge Rates

<u>Handline Smooth</u>	<u>Master Stream Smooth</u>
1" 200 gpm	1 3/8" 500 gpm
1 1/8" 250gpm	1 1/2" 600 gpm
	1 3/4" 800 gpm
	2" 1000 gpm

Inlet Pressures

50 psi + TFL	Relay Pumping
20 psi	Minimum Pump Inlet Pressure
150 psi	Stand Pipes & Sprinkler Systems + Elevation
150 psi	Ladder – Rear Inlet
200 psi	Foam Proportioner (1-1/2") - 95 gpm or 125 GPM

Friction Loss

5psi/100 ft.	5" @ 1000 gpm
15psi/100ft	3" @ 500 GPM
12psi /100 ft.	2-1/2" @ 250 gpm
20psi /100 ft.	1-3/4" @ 125 gpm
30psi/100 ft.	1-3/4" @ 200 gpm
1/2psi /1 ft.	Elevation Head Pressure (1 Story = 10 ft.)

Note: These figures are rounded off for standardization and ease in memorization. You will be required to memorize these guidelines.