

Montgomery County Fire and Rescue Service

FIRE CHIEF'S GENERAL ORDER

NUMBER: 10-03

March 4, 2010

TO: All MCFRS Personnel

FROM: Fire Chief Richard R. Bowers



SUBJECT: Use of Compressed Air Foam System (CAFS)

After reviewing several recent incidents where Compressed Air Foam System (CAFS) was used in the initial stages of structure fires, and after consulting with the Division Chief of Operations, I am providing the following direction effective immediately:

On structure fires when the pump is engaged, pump operators shall place the CAFS Compressor in "Standby Mode". CAFS shall not be used during offensive interior attacks. **CAFS is only authorized for use during overhaul, exterior fire fighting and/or exposure protection provided that the CAFS hose line being used does not come from the same engine company that is flowing interior hose lines during an offensive interior attack.**

This will ensure that initial fire suppression efforts continue to be enhanced by the use of Class A foam solution. When CAFS is desired consistent with the aforementioned situations, pump operators will be able to easily transition without having to disengage and then reengage the pump.

In addition, we are increasing the recommended flows and engine pressures as referenced in the attached chart for your use. I am directing the Division Chief of Operations to continue to evaluate the use of CAFS during structure fires and report back his findings and recommendations. Crews should continue to remain focused on the basics of proper hose line deployment and management to help minimize the risk of reduced water flow at the nozzle.

Issued:

Revised:

Rescinded:

Crimson Engine Plain Water Flows Pressures

Preconnect # & Nozzle	Hose Inches	Length Feet	Nozzle Pressure PSI	Flow Rate GPM	Engine Pressure PSI	Rounded EP PSI by 5's
1 & 2 Fog	1.75"	200	70	175	144	145

1 & 2 7/8" SB	1.75"	200	70	190	137	140
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3 Fog	2"	250	50	250	144	145
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3 1 1/8" SB	2"	250	50	266	156	155
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5 Fog	2"	300	50	250	163	165
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5 1 1/8" SB	2"	300	50	266	177	175
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Notes:

Flows for Fog tips calculated using tables given by TFT for requisite tip washers

Flows for Smooth bores calculated using $29.7 \times D^2 \times \text{Square root of Nozzle Pressure}$

Friciton Loss: $1.75" = 12Q^2$

$2" = 6Q^2$