



**MONTGOMERY COUNTY FIRE AND RESCUE SERVICE
DRIVER/OPERATOR TRAINING PROGRAM**

Practical Application Guide Sheet

Engine: Class B Foam Handline

Candidate Performance Competency: Candidate will place in service a 200' small diameter hoseline using apparatus tank water to flow Class B finished foam. Candidate will select the proper percentage of Class B concentrate to be introduced into the line based upon the scenario presented by the Evaluator.

Task	Value	Score
1. Stop Engine and apply parking brake.	1	
2. Engage pump. Look and listen for signs of successful pump engagement.	1	
3. Place wheel chock on downhill side of front or rear tire. (CFP)	1	
4. At the pump panel, confirm the pump is engaged.	3	
5. Ensure all onboard Class A foam systems are turned off. (CFP)	1	
6. Evaluator will inform the candidate of the fuel type involved in the fire.	0	
7. Set up inline foam eductor. a. Select convenient pump discharge and install the eductor • Note: eductor may also be installed along the hoseline, however it is most often installed at the pump panel for ease of monitoring and maintaining proper pressure b. Place eductor pickup tube in portable foam concentrate supply or connect to apparatus onboard foam cell outlet c. Identify options for additional foam concentrate to support the operation	10	
8. Set up the hose line to flow foam: a. Identify the rated flow of the eductor and attempt to match it with a corresponding fog nozzle. Candidate will explain the reason for matching the flows. b. Attach 1 ½" or 1 ¾" hose with fog nozzle to discharge side of the eductor. (CFP) c. Secure air aspirating attachment to fog nozzle. (CFP)	7	
9. Candidate will select the foam concentrate percentage on the eductor based on the type of fuel. (CFP)	5	

Task	Value	Score
10. Candidate ensures the eductor pickup tube has a concentrate supply. <ul style="list-style-type: none"> Open Class B foam gate valve on the pump panel; or Ensure the end of the pickup tube is at the bottom of the portable foam supply 	4	
11. Open TPM to appropriate pressure. (CFP)	2	
12. Ensure pump is primed using auto or manual primer.	1	
13. Open the proper discharge valve on pump panel. (CFP)	1	
14. Throttle up to proper discharge pressure. (CFP) <ul style="list-style-type: none"> 200psi required at the eductor inlet Discharge Pressure: _____ psi	2	
15. Adjust TPM as needed. (CFP)	2	
16. Crew will manage the hoseline and flow Class B foam.	0	
17. Check attack line to ensure charging, freedom from obstructions, and remove all kinks missed by crew. (CFP)	5	
18. Ensure that there is a means for water to be constantly circulating through the pump for cooling in the event that lines are shut down. TRV should <u>not</u> activate. (CFP)	5	
19. Monitor pump panel, pump, engine compartment gauges and radio.	2	
Return to Service		
20. Throttle down to approximately 100psi. Transition eductor pickup tube from concentrate source to a container of clean water. Clean the hose and appliances while moving the eductor concentrate selector knob through each setting until clear water flows from the nozzle. (CFP)	10	
21. Throttle down, close discharge, and disengage pump.	5	
22. Reset TPM to zero. (CFP)	2	
23. Refill tank water and replenish Class B concentrate.	5	
24. Ensure Engine is ready for service.	5	
25. Crimson Engine - Flush onboard Class B system with garden hose inlet on the pump panel.	5	
Additional Knowledge:		
26. Candidate will describe troubleshooting foam solution that is of poor quality or not being generated. <ul style="list-style-type: none"> Nozzle not fully open or not set to straight stream Inadequate pressure at the eductor or hoseline too long Mismatched nozzle and eductor Clogged or malfunctioning eductor Incorrect eductor setting 	10	

Task	Value	Score
27. Candidate will explain how to calculate the amount of foam solution that can be produced at the 1% and 3% settings given an unlimited water supply and a fixed quantity of foam concentrate. <ul style="list-style-type: none"> Gallons of concentrate ÷ percentage = gallons of solution Example: 20 gallons concentrate at 3% produces 667 gallons of foam solution 	5	
Total Points	100	

Critical Fail Points

Failure to successfully perform any of the following components will result in an automatic failure of this evolution regardless of total score.

- a) Not delivering the requested product
- b) Failure to turn OFF Class A Foam System components
- c) Failure to use wheel chock, engage the parking brake, or otherwise safely park the vehicle
- d) Improper setting of the TPM at any stage of the evolution
- e) Loss of water/pressure in attack line
- f) Not ensuring necessary pressure at eductor; usually 200psi
- g) Improper eductor setting for solution percentage required
- h) Allowing greater than 200' of hose between the eductor and nozzle
- i) Failure to connect air aspirating attachment to nozzle
- j) Charging the incorrect discharge
- k) Failure to adequately flush hoseline and appliances following the evolution
- l) Activation of TRV

Evaluator: Initial beside the final outcome of the exam below.

_____ **PASS** _____ **FAIL – Overall Points** _____ **FAIL – Critical Failure Point**

Evaluator Name

Date

Evaluator Signature