DELAWARE STATE FIRE SCHOOL
For Your Instruction: In-Service Drill

HOSE HANDLING

PURPOSE

The purpose of this drill is to conduct refresher training in basic hose handling skills.

OBJECTIVES

At the conclusion of the drill each participant will have participated by doing the following hose handling evolutions:

1. Identify various appliance used to make up different hose line operation.
2. Connect a fire hose to a hydrant and fully open and close the hydrant.
3. Place hose clamp on a charged 2 1/2" line, replace a section of hose, and release clamp.
4. Two person advance of a charged 1 1/2" or 1 3/4" line and operate the nozzle.
5. Three person advance a charged 2 1/2" line and operate the nozzle.
6. Advance a 2 1/2" charged line by rolling.
7. Demonstrate a one person method for holding a 2 1/2" line (looping).
8. Perform a straight roll.
9. Perform a donut roll.

EQUIPMENT

The following list of equipment is needed to conduct this drill:

1. 300' of 1 1/2" hose or 1 3/4" hose
2. 300' of 2 1/2" hose
3. 1 - 2 1/2" to two 1 1/2" wye
4. 1 - double male adapter
5. 1 - double female adapter
6. 1 - 2 1/2" to 1 1/2" reducer
7. 2 - 1 1/2" nozzles
8. 2 - 2 1/2" nozzles
9. 1 - hydrant wrench
10. 2 - spanner wrenches
11. 1 - hose clamp
12. 1 - fire department pumper
13. 1 - hose strap

SAFETY PRECAUTIONS

1. Participants must wear full protective equipment to include helmet, coat, boots or bunker pants, gloves, and eye protection while doing evolutions.
2. Work area must be adequately lighted and free of traffic hazards.
3. All tools and equipment must be inspected prior to class for any visible damage or unsafe conditions.
4. This drill should not be conducted when weather conditions could cause ice or other unsafe conditions.
5. An experienced pump operator should be used for evolutions involving the use of the engine.
6. The drill leader will be responsible for being familiar with required skills and the proper usage of equipment required for this drill.

REFERENCES

IFSTA "Essentials of Firefighting", Seventh Edition

NOTE:

Evolutions in this drill are dealing with basic hose handling and appliance only. It is not the intent of this drill to use equipment such as ladders.

SKILLS

1. Basic equipment identification prior to doing evolutions.

    a. Drill leader will layout all required equipment.
    b. As a group, participants will be asked to identify equipment and explain use of the item.

2. Connect a fire hose to a hydrant and fully open and close the hydrant.

    a. Layout a 50' length of 2 1/2" hose with nozzle attached
    b. Remove one hydrant cap with wrench

        1) Tell participants caps should only be hand tight

    c. Place hydrant wrench on operating nut

        1) This keeps track of wrench

    d. Connect female hose coupling to hydrant

1) Ask participants what they would do if it were a male hose coupling

e. Open hydrant fully with hydrant wrench

1) Arrow on top of hydrant indicate way to turn wrench

f. Close hydrant fully with wrench
g. Bleed pressure out of line, disconnect, have another participant perform the skill

NOTE: Variations of this evolution can be conducted by using a wye, a company hydrant valve or a reducer and 1 1/2" hose.

3. Two person advance of a charged 1 1/2" or 1 3/4" hose line and nozzle operator.

a. Prepare a 150' hose line with a nozzle
b. Connect line to engine and charge to 125 pound pressure
c. Position nozzle person with one hand on nozzle valve, the other hand on hose a foot or so behind nozzle. Rest hose against waist and across hip
d. Place second person on same side of hose as nozzle person about 3-4 feet back. Back-up person holds hose with both hands and rests it against waist and across hip.

1) Back-up person is also responsible to counteract any back pressure

e. Instruct nozzle person to open nozzle slowly
f. Have hose team move nozzle by slowly walking forward. Back-up person drag hose.

1) Other participants can move hose forward further down line

g. Have hose team move backward to starting point and shut down nozzle

NOTE: Two hose lines could be used allowing more participants to participate. Drill leader could then position himself between the lines and practice a coordinated attack movement.

4. Three person advance of a charged 2 1/2" line and nozzle operation.

a. Prepare a 150' hose line with nozzle
b. Connect line to engine and charge to 100 pound pressure

c. Place nozzle person at nozzle, one hand on nozzle handle, the other hand behind the nozzle
d. Place second person on hose behind and on the same side as the nozzle person. Place third person on hose behind second person on same side as nozzle person
e. Instruct second and third member to support hose and lean forward to absorb back pressure
f. Have nozzle man slowly open nozzle
g. Have hose team advance nozzle forward by slowly walking

1) Additional participants can help move rest of line

h. Have hose team move line backward to starting point and shut down nozzle

5. Advance a 2 1/2" charged line by rolling

a. Prepare a 150' 2 1/2" hose line with nozzle

1) Lay line out with curves, not absolutely straight

b. Connect to engine and charge to 100 pound pressure
c. Form loop

1) Straighten hose from water source towards nozzle
2) Slack hose will accumulate, it will tend to form "S" shape
3) Lay one segment of "S" over to form a large loop
4) Stand loop upright and roll the slack hose towards nozzle

6. Looping - one person method for holding a 2 1/2" line

a. Prepare a 150' 2 1/2" line with nozzle
b. Connect to engine and charge to 100 pound pressure
c. Take approximately 25' of hose immediately behind nozzle and form a loop
d. Pass nozzle beneath loop and form a loop
e. Secure loop by tying hose at crossover point with hose strap
f. Kneel or sit on hose line at the crossover point and operate the nozzle

1) This method allows adequate up and down nozzle movement

7. Placing a hose clamp on a charged 2 1/2" line, replace a piece of hose, release clamp

a. Lay out 150' section of 2 1/2" with nozzle

b. Charge to 100 pound pressure
c. Open clamp, place on hose

1) Place the hose evenly in jaws to avoid pinching
2) Apply hose clamp no farther than five feet from the coupling on the incoming water side

d. Close clamp slowly

1) If using a press down type of clamp, stand to one side for safety as the operating handle is prone to snap back due to pressure

e. Uncouple middle section to simulate broken hose
f. Re-connect hose to simulate installing new section

1) Tell participants hose may stretch or move when charged and they may have to straighten to get new section to fit back in

g. Release hose clamp

1) Same safety precautions apply as when applying

8. Performing a straight roll

a. Lay out a section of hose
b. Fold male coupling over hose

1) Coupling placed inside of roll for protection

c. Roll hose to female coupling
d. Lay roll on side, flatten out with foot

9. Performing a donut roll

a. Lay out a section of hose

b. Grasp male coupling and fold hose so male coupling is on top of bottom section

1) Leave male coupling about four feet from female coupling

c. Return to fold and start rolling hose toward coupling

1) A second participant can pull slack hose back as it appears ahead of

roll

d. Once rolled, lay roll on side and flatten with foot

CONCLUSION

At the conclusion of the skills, the drill leader will do the following:

1. Re-inspect the equipment for any damage or excessive repair.
2. Secure all equipment as per department policy.
3. Secure the training area.

Date of Original: 09/00