

# HOT FLARE FOR ANGLE METER STOP REPLACEMENT CONTEST

## Rules and Regulations

## Introduction

This will be an individual (Contestant) vs. time competition with the best time winning.

- 1. Each contestant will be required to:
  - a. Remove a 5/8" meter with attachment from a 3/4" angle meter stop.
  - b. Cut <sup>3</sup>/<sub>4</sub>" copper to remove old angle meter stop.
  - c. Install a new flare nut
  - d. Re-flare the copper and install a new angle meter stop, drip tight and in alignment, while the line is under pressure.
  - e. Reconnect the 5/8" meter and new gasket.
  - f. Turn on the angle meter stop. (The run).
- 2. Each contestant will be allowed (2) two opportunities, the <u>best time</u> of the two runs plus any penalties will be your official time. The winner will be the contestant with the lowest overall time. In the event of a tie, the contestants will have a run off (1) one opportunity. See penalties for official time.

#### General

- 1. The work area will be limited to an 8' x 8' square.
- 2. All equipment, tools, materials, shall be positioned by the contestant on the ground in the work area prior to the start of the run.
- 3. There will be a support holding the <sup>3</sup>/<sub>4</sub>" line t the riser for the angle meter stop and meter with coupling attached.
- 4. The same set of tools will be used by all contestants and will be supplied for you. Any request for a change of tools will be decided by the head judge.
- 5. The timing for the even shall begin at the head judge's signal and end when the contestant has turned on the angle meter stop and stops all work.
- 6. Water pressure for the contest will be set at 40-50 psi.
- 7. Pipe dope may be applied to the threads of the angle meter stop at the option of the contestant, but only after the official start of the run.

8. To begin each run, the flare nut will be in place, ginger tight, on the angle meter stop prior to the start of the run, and the angle meter stop will in the off position.

#### Safety

- 1. Normal water utility safety practices will be observed at all times during the flaring contest exercises.
- 2. Safety equipment required for all contestants will be:
  - a. Hard hat will worn by all contestants during the event.
  - b. Safety glasses or goggles will be worn by the contestants during the event.
  - c. Gloves will be worn by the contestant during the event. (Any type is acceptable.)
  - d. Safety boots or shoes with steel toes will be worn by the contestants during the event.
  - e. Knee pads will be optional.
  - f. Trousers and shirts will be worn by the contestants.
- 3. If at anytime while competing the contestant's hard hat or safety glasses fall off, the hat or glasses will be put back in place and then the work will be resumed.

### **Material and Equipment**

- 1. Two (2) pipe wrenches 14" rigid
- One (1) hammer shall be brass 3 lb for flaring (Reed HAM 3 lb 06088) or (Mueller Co. H-18025).
- 3. One (1) Mueller hot flaring tool. (Mueller 18005)
- 4. One (1) adjustable wrench 12" (Crescent-type)
- 5. Tubing cutters, two (2), heavy duty, Reed Manufacturing Company (T-20) or Rigid equivalent. The team contestant shall examine the cutting wheels before each run to determine their condition and ask the Judges for a replacement if necessary. THESE ARE THE ONLY CUTTERS ALLOWED!
- 6. Type K copper tubing  $-\frac{3}{4}$ " x 18" long for each flare run.
- 7. Angle meter stop flare type  $\frac{3}{4}$ " with 90 degree shut off.

## Judging

1. The judging of each run shall consist of three (3) judges.

- 2. The judges will be responsible for timing the event with the Head Judge being the one to announce the START and STOP of each run. The three times, as recorded by the judges, will be used to determine the official time of the urn by omitting the highest and lowest time, causing the middle time to be the official time of the run.
- 3. The judges will watch for safety violations during the actual runs and assess appropriate penalty times as required.
- 4. If at any time a judge sees a safety violation that requires the turn to be stopped, that run will net be allowed to be redone.
- 5. The judges will check for leaks at the flare and the meter coupling and also check for meter alignment and meter level.

#### Penalties

- 1. Various penalties will be assessed by the Head Judge for any infraction of the rules as described herein or for any flagrant violation of the normal safety practices.
- 2. The penalties will be in the form of a predetermined number of seconds added to the time of the contestant's run which will then be the official time of that run. Each of the contestant's two runs will be considered separate for penalties.
- 3. Contestants without proper personal safety apparel, as prescribed above, will not be allowed to compete until he or she has obtained the proper apparel in a reasonable amount of time during the contest.
- 4. Penalties for leaks and safety violations will be in seconds
  - a. Leaking connection, barley oozing water and just discernable to the judge plus two (2) seconds.
  - b. Slow, obviously dripping connection plus four (4) seconds.
  - c. Squirting, continuous leaking connection plus six (6) seconds.
  - d. Alignment (maximum allowed 5 degrees out of alignment) plus four (4) seconds.
  - e. Meter level (maximum allowed 10 degrees off level) plus (4) seconds.
  - f. Losing tools, equipment or materials out of work area plus (4) seconds. The meter gasket is excluded from this penalty.
  - g. Safety violations plus ten (10) seconds per violation.

Any disagreement with penalty decisions will be decided by the Head Judge and the decision will be final.

Revised 10.03.2016