



2019 VA AWWA Rodeo Events Rules

Note: No walk-on registrants on the day of events. All contestants shall be pre-registered.
All participants are required to attend the Rodeo Entrants Meeting at the hotel

Revised September 2018

AWWA ACE Competitions - Rules and Regulations PIPE TAPPING

INTRODUCTION

1. The teams will be required to tap a water pressurized ductile iron pipe, install a corporation stop, cut and flare 3/4" copper tubing for installation of a water service line with a curb stop and connect this line to a meter yoke.
2. Each team will be allowed to have two (2) official taps (turns), at their option, to complete the tapping event with the shortest time of the two taps to be their *Official Time* for the event.
3. A time period of 30 minutes shall be allowed for each team to complete their two (2) official taps.
4. A time period of 15 minutes shall be allowed for each team to prepare for the tapping event in a staging area (this may include a five (5) minute time period in a designated area between the staging and tapping carpet), this includes cutting copper and securing all parts and material needed to complete their two (2) official taps.
5. The four (4) men's and two (2) women's teams from both Preliminary Tapping Competitions with the fastest Official Times from both divisions will advance to the final round to compete against the previous year's tapping champions. In the final competition the title will be awarded to the fastest tapping time.
6. The Preliminary teams' times will be used only for qualifying for the finals and to establish the starting schedule of the finals, i.e., the slowest time of the six (6) will be the first to tap in the finals. The starting times for the finals will be assigned immediately following the conclusion of the Preliminaries.
7. The AWWA ACE Pipe Tapping Competition will take place over three days with the Preliminary Tapping Competition being held on day one and day two at a designated area. The Final Pipe Tapping Competition will occur on the third day of the competition (typically the last day of the conference) at the same location or within the Exhibits Area as required. The competition location will be announced to all teams entered in the contest each year before the beginning of the Annual Conference.

DISCLAIMER

8. AWWA specifically does not endorse products manufactured by sponsors and takes no position concerning the adequacy of such products or their compliance with any AWWA Standard.

9. Each competitor will be required to complete the proper waiver and registration documentation prior to competing in any event. **Verification of eligibility will be required at the time of registration.**

10. This competition is officiated by competent officials who are striving for fairness in their judgement for the events so that all competitors are judged as equally as possible. Fair and equal treatment for each competitor is the goal of this competition. There is no intention to provide anyone with an advantage. This competition is for the fun and enjoyment of the participants and spectators.

11. In order to be eligible, Sections must verify that each person is authorized to compete. Details regarding eligibility are noted in the next section.

12. Pipe Tapping team members or team coaches who have participated as a competitor or coach are eligible to join the Pipe Tapping Subcommittee. Current competitors and coaches are ineligible to serve on the Pipe Tapping Subcommittee. This is to eliminate any perceived conflicts of interest.

ELIGIBILITY & MEMBERSHIP

13. A tapping team shall consist of no more than four (4) persons: three (3) workers and one (1) coach. The coach may also serve as the alternate worker whenever the team shall deem appropriate and a new coach appointed from the four original team members for the next tap. No more than three (3) workers and one (1) coach are permitted in the secured tapping area during the team's preparation period and during the two (2) official taps.

14. Each AWWA Section may enter one (1) men's team and one (1) women's team in the AWWA ACE Preliminary Pipe Tapping Competition. Multi-state or multi-province Sections may enter up to 2 men's teams and up to 2 women's teams. Women's and Men's teams will not be separated in conducting the preliminaries. Sections with the returning champion may enter up to two teams, the returning champions in addition to one other team. Sections that are hosting the Annual Conference (the Local Host Section) can enter up to two teams.

15. Each AWWA ACE Pipe Tapping Competition participant must be a current AWWA member from the time of registration through the ACE event. This membership may be an individual membership, or the participant can be a regular employee of an AWWA Utility Member or Service Provider Member. Each Section is responsible for verifying the membership status of each participant before entering them into the competition

16. Only AWWA Section teams that have qualified by competing in a Section Pipe Tapping competition are allowed to enter the AWWA ACE Pipe Tapping Competition. If there are not enough teams for a Section to hold a Pipe Tapping competition at the Section level, a team may enter the AWWA Pipe Tapping competition with approval from the Section that they are representing.

REGISTRATION

17. To enter, follow the instructions on the Pipe Tapping web page. **No registration is available onsite. To allow proper determination of the number of teams, AWWA must be informed by the Sections before May 1 of any anticipated late team**

registrations each year. A coach's meeting will be held each day of the event for those teams competing that day. All coaches are expected to attend.

18. Each participating team member will receive a complimentary **ACE Exhibits Only Registration**. Each competitor is allowed one (1) complimentary **Spouse/Guest Registration** granting access to the Exhibit Hall during official Exhibit Hall hours.

19. Each competitor and coach must register themselves and sign their own waiver. Please ensure that all members of the team register with the same team name.

20. Each team must make its own travel and lodging arrangements. AWWA will not make travel or lodging arrangements for any team. AWWA does not reimburse travel expenses (airfare, lodging, food) for any team. Please check with your Section on travel reimbursements.

WHAT WINNING TEAM RECEIVES

21. The AWWA ACE Annual Pipe Tapping Champion is automatically eligible for the next year's AWWA ACE Pipe Tapping Competition Finals as a special entry and is not counted as the Section entry.

22. The Championship team (including coach) will:

- a. Be presented with a team trophy to keep at the close of the competition.
- b. May be featured in AWWA publications and will be listed in the Pipe Tapping Hall of Fame on the AWWA website.
- c. Be reimbursed for expenses outlined by the official AWWA Returning Champion Guidelines, to return for the next AWWA ACE Pipe Tapping Competition at ACE the following year. (In general, expense reimbursement covers transportation costs to and from the convention site, hotel, and meals).

23. The Second, Third, and Fourth-place teams will:

- a. Be presented with a trophy to keep at the close of the AWWA ACE Pipe Tapping Competition.
- b. May be featured in AWWA publications.

COMPETITION

22. There is no such thing as equipment failure. All equipment was received in good working order prior to the AWWA ACE Pipe Tapping competition. This is a contest of skill and dexterity as well as speed.

23. All equipment utilized in the pipe tapping competition is new or reconditioned and in perfect working condition, and as such is in new condition. Any tools, equipment, and other supplies provided for this competition that are broken/damaged will be considered to be broken/damaged by neglect of the team and will not be replaced during their turn.

a. Broken bits are the result of neglect by the team and only two bits are allowed per team, one for each tap. A broken bit is the problem of the team with the broken bit and will not be replaced during their turn.

b. There is no time penalty for broken equipment or drill bits unless resulting from obvious malicious mishandling.

c. Malicious treatment of equipment may be considered a safety violation depending on the circumstances.

24. The location and the size of the space for the AWWAACE Pipe Tapping competition will be determined at the discretion of AWWA and dependent on the layout of the facility. The work area for the pipe tapping competition shall be large enough to accommodate all competitors and judges and their equipment. Equal space must be provided for each team. A minimum of 10' clear area shall be provided between the working area and the spectators to afford safety from accidental flying tools or materials during the competition.

25. When a stage is utilized for the contest, suitable carpet shall be laid over the entire stage to present uniform footing for all contestants. Arrangements should be made to eliminate all water spilled during an event before the next event starting so as to provide the best possible working conditions for each team for both of their taps.

26. The team is responsible for ensuring the water supply is turned on and the air has been bled from the Ductile Iron Pipe prior to each tap. The corporation stop shall be tapped into the pipe at approximately 45 degrees from the top of the pipe.

27. Pipe shall be securely fastened to support blocks at a height of 8.5' to the bottom of the pipe above the ground or stage floor. Support blocks shall be of adequate construction so as to secure the pipe firmly in position suitable for the rough handling required.

28. Distance from the pipe to the meter yoke shall be approximately 10' and nearly perpendicular to the pipe as best will accommodate the use of two straight 6' lengths of copper service pipe. This meter yoke stand may be set by the team, under the supervision of the official(s), to any precise distance that will best accommodate their style of work. Angle meter yoke shall be approximately two (2) feet above the ground or stage floor; this includes the 1/2" plate attached to the bottom of the tripod.

29. Curb stop to be located approximately half way between the pipe and the meter yoke. End connectors will be inspected and attached, by a team member, to each end of the curb stop and to the meter yoke prior to the start of the event. The officials will then inspect the fitting to insure the end connectors are in the proper position, fully threaded, but not tight, prior to start.

30. The tubing representing the service line shall be 3/4" type K copper, four straight 6' lengths, each team will cut and crimp the copper before the start of their team's official time under supervision of an official.

31. Curb stop position after connections to tubing shall be no more than 4" above the ground/floor to the top of the inlet tubing and shall be in a "near vertical" position, i.e., no more than 10 degrees left or right of vertical.

32. All connections shall be flared and drip-tight. The official(s) will bleed air from the service line before checking for leaks.

33. The service line shall contain no crimps that would impede the normal flow of water through the pipe. Officials shall determine the severity of any crimp by disconnecting the nearest joint carefully without disturbing the crimped section of the pipe and passing a marble or sphere approximately 1/2" diameter through the pipe past the crimped section. If the marble passes through the crimp, the crimp is not damaging and there is no penalty. If the marble does not pass through the crimp, a penalty will be assessed to the event time.

34. An end connector will be utilized on the one end of the meter yoke, which will be connected to the service line. This connector will serve to protect the threads on the meter yoke. The competing team will examine the connector threads carefully prior to the start of the event and request a new adapter from the head official if the threads are damaged enough to impair their work.

35. The tapping team shall position themselves and all equipment, tools, and materials beside the pipe to be tapped prior to the start of the tap. At the start of the tap, team workers may be standing or kneeling on the floor but shall not be touching any piece of equipment or tools.

36. The coach shall be positioned out of the way of the team and the official(s) and may be located anywhere in the area. The coach may lead the team by instructions and encouragement in any way but shall not be allowed to physically assist the team or utilize in any way the tools or equipment during the tap.

37. The tapping machine may be inspected, cleaned, and lubricated as necessary by the team before starting either turn. The drill bit will be chosen by the team from a ready supply of bits provided and may be assembled in the tapping machine prior to the tap at the option of the team. The corporation stop may be placed in the adapter prior to the tap at the option of the team. Joint compound may be applied to the threads of the corporation stop after time starts at the option of the team.

38. Saddles and rubbers for the tapping machine may be assembled and ready on the floor before the tap. Chain hooks may be in the chain yoke on the floor, but the chain must be on the floor and not hooked to the chain hooks before the start of the tap.

39. The same bar shall be used to make the tap and insert the corporation stop. Two bars will not be allowed for a tap.

40. The tapping machine feed-nut-and-yoke shall be securely in place around the boring bar at all times while the pipe is being drilled, tapped, (*) and inserting the corporation stop. If the feed-nut-and-yoke falls off and there is no attempt to continue inserting (turning ratchet) the drill or corporation stop, THE TEAM WILL NOT BE PENALIZED.

41. The corporation stop shall be securely inserted into the pipe with no more than four (4) threads showing when the tap is completed. A designated official will count threads. The threads are counted at the half-way-point on both sides of the corporation. If more than four (4) threads are counted on both sides, THE TEAM WILL BE PENALIZED. The official(s) decision on the matter will be final.

a. (*) When removing the boring bar from the tapping machine after threading has been completed, the yoke MUST be in place until the tap has disengaged from the pipe and the boring bar must be FULLY extended before the cap is removed from the cylinder.

b. (**) Failure to follow this procedure will be considered a SAFETY VIOLATION and the team shall be penalized accordingly.

c. (***) When inserting the corporation stop, the cap MUST be installed on the cylinder before the yoke is placed on the boring bar. The corporation stop will be considered to be inserted when the ratchet is reversed to disengaged from the corporation stop

42. Pine tar or grip enhancers may be applied to gloves. Once the pine tar or grip enhancer has been applied, the gloves cannot be used to touch any portion of the equipment or materials until after the official start of the tap.

43. The timing for the event shall begin at the head official's signal and end when the corporation stop is turned on by one of the workers and all work has ceased. At that time, the head official shall shout STOP or sound a suitable signal announcing the end of the tap. All team members will back out of the immediate work area to permit the officials to evaluate the work.

EQUIPMENT & MATERIALS

44. All equipment is to be provided by AWWA, In Kind Material Sponsors, and the Local Host for each tap.

45. Mueller B-101 tapping machines (not 100), completely outfitted, including new style ratchets; old style ratchet may be allowed in competition if available. Bicycle-type chain is not allowed.

46. Brass corporation stops, Mueller Co. (H-15000N), and curb stops, Mueller (H-1502-2N), 3/4", new, one each, to be provided for each tap.

47. Flaring nuts shall be provided for all connections to stops and meter yoke and shall be as manufactured by Mueller Co. (H-15430N).

48. Type K copper tubing, 3/4", 6' lengths, two (2) lengths for each tap.

49. Meter yoke, Mueller Co. (H-14180), 5/8" x 3/4", secured firmly to a portable stand.

50. End connector, Mueller Co. (H-15460N), 90-degree female connector, 3/4", shall be provided to allow the service line to be connected to the meter yoke. This connector is utilized to protect the threads of the meter yoke from the service line connections.

51. Pipe wrenches, four (4), 14", REED Manufacturing Company (RW-14)

52. Hammers, two (2), shall be a brass, 3lb hammer for flaring, Mueller Co. (H-18025) or REED Manufacturing Company (HAM3, 3lb, 06088).

53. Adjustable (crescent-type) wrenches, two (2), 12", REED Manufacturing Company (CW12).

54. Tubing cutters, two (2), heavy duty, REED Manufacturing Company (T-20). The team shall examine the cutting wheels before each tap to determine their condition and ask the officials for a replacement if necessary.

55. Flaring tools, two (2), Mueller Company (H-18000), or REED Manufacturing Company (HF 3/4).

56. Cutting grease, Mueller Co. (88366) shall be supplied for all teams to utilize in the contest.

57. ONLY lubricating grease from Mueller Co., light machine oil in spray or liquid, and WD- 40 lubricant shall be provided for teams to lubricate the equipment and tools. No lubrication of any type will be allowed on the end connectors, threads, or flaring tool prior to the start of the tap.

58. Combined drill-and-tap tools will be supplied for each team. This tool shall be as manufactured by Mueller Co. (680539), Decatur, IL (217)254-7000, Salser Co. (Super- Tuff 3/4"cc), Ocala, FL (800)782-5268, REED Manufacturing Company (DT 75, 3/4"-cc), and Erie, PA(814)452-3691.

59. Pipe to be tapped shall be AWWA C151, Class 52, 6" Ductile Iron Pipe, cement lined, capped on each end, pressurized and regulated to a pressure of 40-45 psi, by a suitable connection to the water supply.

JUDGING

60. The Pipe Tapping Subcommittee Chair may appoint one of the officials as head official for the daily competition. The head official shall be in charge of the pipe tapping on the floor each day to make rulings as required by the circumstances for any penalties. If there is a disagreement between the head official and a team coach on any interpretation of the rules, the pipe tapping committee chair shall make the final ruling. **Officials will not be allowed to judge their respective Section's team(s).**

61. The number of teams for each round shall be limited to the space available for the competitors to perform adequately or to the number of officials available for each round.

62. The officials shall be responsible for timing the events with the head official being the one to announce the START and STOP of the event. Each competitor's time as recorded by the official, plus any penalties accrued, shall be used to determine the official time for each contestant. The head official shall be in charge of the competition and after consulting with the other officials of any infraction of the rules shall make the ruling as required by the circumstances for any penalties to be assessed.

63. The head official shall see that all tools, materials, and teams are in the required positions prior to starting the event. He/She shall also ensure the work area is free from any obstructions or spectators; this includes any standing water.

64. The officials shall watch for safety violations during the actual events and assess appropriate penalty times as required. During the time of the event not taken up by the actual competition, the officials shall see that all preparations for the event are accomplished in a safe manner.

65. No timing official will be assigned to a contestant who works for the same organization.

66. Squirted, continuous leaking connection spraying water on any other connection of the service line shall be covered appropriately with a towel or something to deter the water away from another connection while judging the next connection for leaks. If such measures are insufficient to block the flow of water to allow proper judging of the next joint, the connection may be tightened by the officials, at the head official's option, during the inspection, so that other joints will not be doused with water.

SAFETY & CONDUCT

67. Standard water utility safety practices will be observed at all times during the competition. Any flagrant violations will be penalized by the addition of time to the competitor's raw time as described in Procedural Violations.

68. Unsportsmanlike behavior will not be tolerated and could result in individuals or teams being disqualified from the competition. Judges, Competitors, and/or volunteers may not use, possess, or

be under the influence of alcohol and/or illegal substances while performing duties related to the competition. Violations of this will be determined at the discretion of AWWA Staff and the Pipe Tapping Competition Subcommittee Chair.

69. Teams will not be allowed to participate if they are wearing articles of clothing or using equipment plainly displaying offensive language, slogans, or graphics.

70. Safety equipment will be required to be provided by each competitor. Teams without proper personal protective equipment as described below will not be allowed to compete until they have obtained the proper personal protective equipment in a reasonable amount of time during the competition. The safety equipment required of each competitor shall be:

a. Head protection for ALL team members (includes the coach) shall be worn during the event. The head protection (hard hats) shall conform to the **American National Standard Safety Requirements for Industrial Head Protection (ANSI Z89.1-2014)**. If a hard hat falls or is knocked off of a team member, the hat must be replaced on the team members head as soon as possible or a safety violation will be imposed. Head protection must be worn in accordance with manufacturer's recommendation and is not to be worn backwards.

b. Eye protection (Glasses or Goggles) are required to be worn by ALL team members (including the coach) during the pipe tapping contest. Eye protection must conform to the **American National Standard for Occupational and Education Eye and Face Protection (ANSI Z87.1-2015)**.

c. Gloves are required to be worn by all three team members. The coach is exempt while performing coaching duties. Gloves shall be full-fingered and suitable for construction related tasks. Lab type gloves, such as latex material, and gloves without complete fingers are not acceptable for the competition. Sport gloves with full fingers are allowed.

d. Foot Protection shall be required to be worn by ALL team members (includes the coach) and shall conform to the **ASTM F243-17 - Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear** (incorporates ANSI Z41.1 by reference). Sneakers and dress shoes that meet this standard are also allowed.

71. Long or short sleeved shirts and long-legged trousers are required to be worn by all three workers during the event. No tanks or cutoff shirts, and no shorts are allowed.

72. No personal bags will be allowed on the floor.

73. During this contest, an ordinary task (tapping a distribution pipe) is performed in an extraordinary manner. Therefore, for this contest to be conducted safely, it is necessary for the yoke to be in place at all times during the use of the drilling, tapping, and inserting procedure as outlined in these rules. Failure to follow this procedure will be considered a safety violation PLUS TWO (2) PROCEDURAL VIOLATIONS (10+10+10=30 SECOND VIOLATION) AT THE DISCRETION OF THE HEAD OFFICIAL.

74. Children under the age of 16 entering the Exhibit Hall during show hours need to be accompanied by a parent or guardian at all times. No one under the age of 16 is allowed in the Exhibit Hall area during move-in, move-out, or non-show hours. A parent or guardian assumes all risks and responsibility for the safety of his or her child. Anyone 12 or older will require a badge to enter the Exhibit Hall.

75. All elements of the competition must remain within the confines of the designated area, and at a noise level not offensive to nearby exhibitors. Speakers and other sound devices should be

positioned so as to direct sound into the competition space rather than into the aisle. Sound and noise may not exceed 90 decibels, management of volume levels will be the responsibility of AWWA staff. Announcer must terminate any form of attention-getting device or presentation when crowds jam aisles or infringe upon other exhibitors' areas.

PENALTIES

76. Various penalties will be assessed by the head official for any infraction of the rules as described herein or for any flagrant violation of normal safety practices.

77. The penalties will be in the form of a predetermined number of seconds added to the total time of the team's event time which will then be the OFFICIAL TIME of that event.

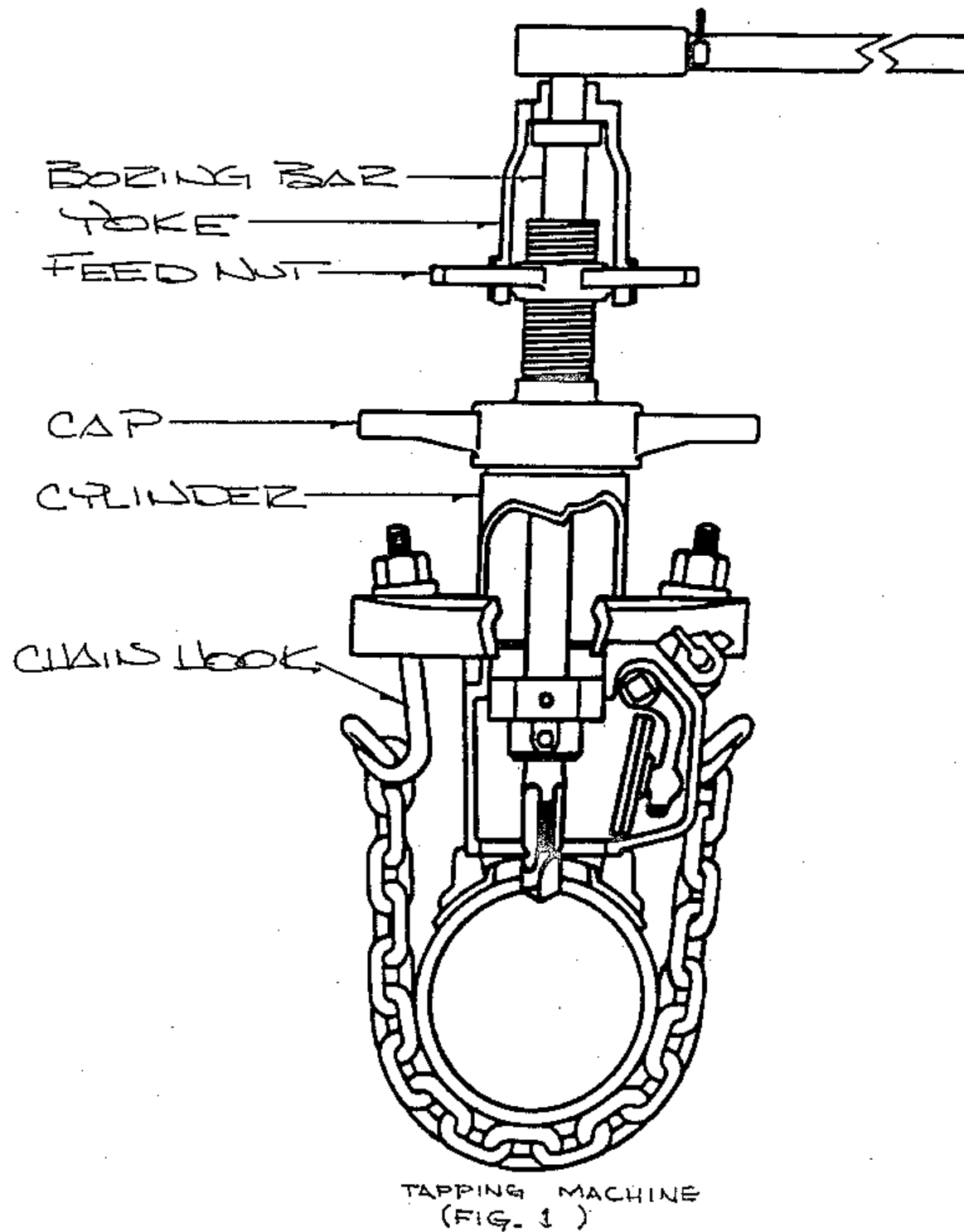
78. In the event of any disagreement with penalty decision, the head official's decision is final.

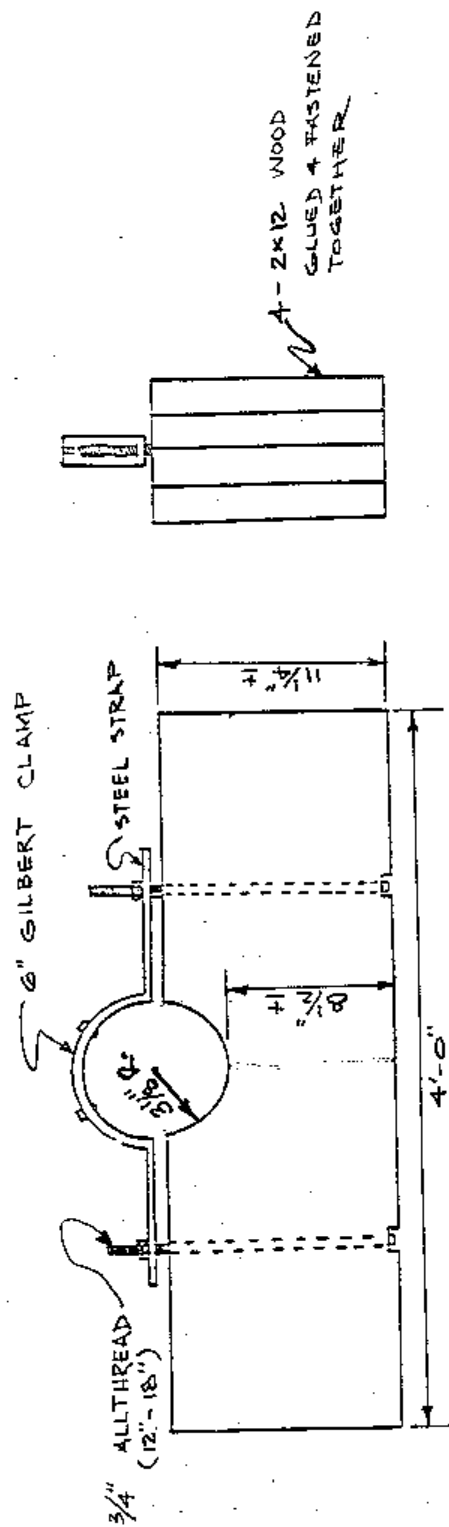
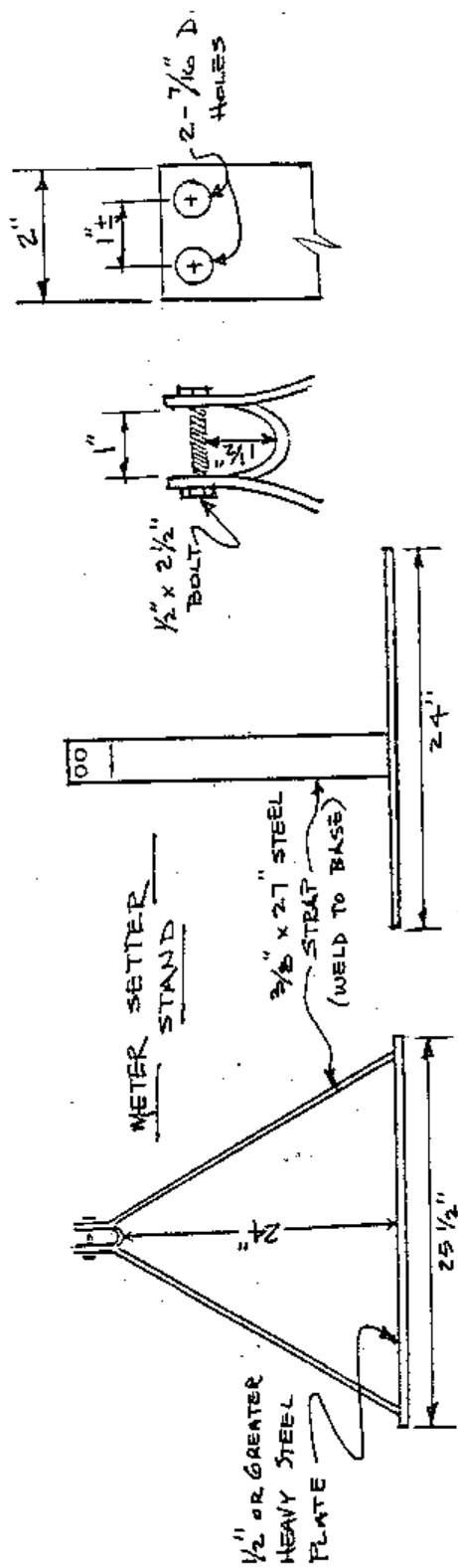
79. There will be NO INSTANT REPLAY allowed for reversing any decision after the head official has made a final determination of any infraction in these rules.

80. Penalties shall be:

- a. Safety violation such as throwing of tools, PPE penalty, etc. (+10 seconds each)
- b. Procedural violation by any member of the team. This is a general penalty for actions of the team that may not specifically be covered in these rules but are of sufficient gravity to the Judges as to warrant a penalty. (+10 seconds each)
- c. Leaking connection, barely oozing water and just discernable to the judges (+4 seconds each)
- d. Slow, obviously dripping connection (+6 seconds each)
- e. Squirting, continuous leaking connection (+8 seconds each)
- f. Curb stop too high above ground/floor and/or not vertical (4", + or - 10 degrees, (+4 seconds each)
- g. Crimp in service line that will not pass 1/2" marble (+10 seconds each)
- h. More than four (4) threads showing on the inserted corps (+10 seconds)
- i. YOKE PENALTY - shall be 10+10+10=30 (or less at the discretion of the Judges depending on the nature of the violation). Having the yoke slip off the bar accidentally and a member of the team immediately place the yoke back on the bar DOES NOT constitute a violation. (+30seconds)

81. If the corporation stop blows out of pipe or any connection blows apart after time is stopped, the team is DISQUALIFIED for that tap.





(NOT TO SCALE)

D.I.P. STAND (2-MIN. REQ'D)

(FIG. 2)

AWWA ACE Competitions - Rules and Regulations METER MADNESS

Revised September 2018

INTRODUCTION

1. The Competition is a measure of an individual's skill at assembling a meter quickly, totally, and accurately. All parts will be assembled in proper manner and the re-assembled meter shall be tested by the judges for ability to meter water and for water leakage from the meter.
2. This is a test of skill for individuals. To facilitate a large number of competitors, groups of four (4) to six (6) persons may be placed together in a single round. The START will be simultaneous for all competitors in that round, but each competitor will be timed separately by an Official to record his/her raw time in assembling the meter.
3. Each individual competitor will be required to completely assemble a water meter commonly utilized by water utilities for residential customers. The event is timed with multiple competitors assembling the meters simultaneously.
4. Each competitor will be furnished with a bucket, or other suitable container containing the completely disassembled meter. In addition, the contents of the bucket will contain a random number of miscellaneous extra parts, related or unrelated, metallic or non-metallic. This will ensure that the competitor must be thoroughly familiar with all parts of the meter he/she is assembling. All competitors shall receive exactly the same number and type of extraneous parts for their turn.
5. A time period of no more than five (5) minutes shall be allowed for each competitor to complete his/her turn. TWO TURNS shall be allowed for each competitor with the faster of the two times being used for their Official Time.
6. Each individual competitor shall be ready to compete and at his/her assigned station ten (10) minutes prior to their assigned time. Competitors absent from their stations at their scheduled time shall be assigned a new starting time or forfeit their turns at the decision of the Head Official.
7. The AWWA ACE Meter Madness Competition will last for one day of the conference. The contest location will be announced to all competitors entered in the competition each year before the beginning of the Annual Conference.

DISCLAIMER

8. AWWA specifically does not endorse products manufactured by sponsors and takes no position concerning the adequacy of such products or their compliance with any AWWA Standard.
9. Each competitor will be required to complete the proper waiver and registration documentation prior to competing in any event. **Verification of eligibility will be required at the time of registration.**
10. This competition is officiated by competent officials who are striving for fairness in their judgement for the events so that all competitors are judged as equally as possible. Fair and equal treatment for each competitor is the goal of this competition. There is no intention to provide anyone with an advantage. This competition is for the fun and enjoyment of the participants and spectators.
11. In order to be eligible, Sections must verify that each person is authorized to compete. Details regarding eligibility are noted in the next section.

12. Meter Madness competitors who have participated as a competitor or coach are eligible to join the Meter Madness Subcommittee. Current competitors and coaches are ineligible to serve on the Meter Madness Subcommittee. This is to eliminate any perceived conflicts of interest.

ELIGIBILITY & MEMBERSHIP

13. The Meter Madness Competition is an individual competition. Each qualified competitor is solely responsible for his/her performance.

14. Each AWWA Section, including Multi-State/Provincial Sections, may enter up to two (2) representatives to the AWWA ACE Preliminary Meter Madness Competition. The Section with the returning champion is permitted to send one (1) additional competitor (up to a total of three (3)). The ACE Local Host Section is permitted to send one additional competitor (up to a total of three (3)).

15. Each AWWA Meter Madness competitor must be a current AWWA member from the time of registration through the ACE event. This membership may be an individual membership, or the competitor can be a regular employee of an AWWA Utility Member or Service Provider Member. Each Section is responsible for verifying the membership status of each competitor before entering them into the competition.

16. Only AWWA Section competitors that have qualified by competing in a Section Meter Madness competition are allowed to enter the AWWA Meter Madness Competition. If there are not enough competitors for a Section to hold a Meter Madness competition at the Section level, a competitor may enter the AWWA ACE Meter Madness Competition with approval from the Section that they are representing.

REGISTRATION

17. To enter, follow the instructions on the Meter Madness web page. **No registration is available onsite. To allow proper determination of the number of rounds required,**

AWWA must be informed by the Sections before May 1 of any anticipated late team registrations each year. Each competitor must attend a Mandatory Competitor's Meeting prior to the start of the competition. Among other things, the timing and order of competition will be determined at this meeting.

18. Each competitor will receive a complimentary **ACE Exhibits Only Registration**. Each competitor is allowed one (1) complimentary **Spouse/Guest Registration** granting access to the Exhibit Hall during official Exhibit Hall hours.

19. Each competitor and coach must register themselves and sign their own waiver. Competitors are allowed to provide a nickname for themselves if desired.

20. Each competitor must make their own travel and lodging arrangements. AWWA will not make travel or lodging arrangements for any team. AWWA does not reimburse travel expenses (airfare, lodging, food) for any team. Please check with your Section on travel reimbursements.

HOW YOU WIN

21. Prior to the pre-designated start time, each competitor will assume a starting posture of their choice. The Head Official will count down to "GO" to initiate the Meter Madness event. **EACH COMPETITOR ASSEMBLES HIS/HER WATER METER AND THEN RAISES HIS/HER HAND TO SIGNIFY HE/SHE IS FINISHED WITH THEIR TURN.** All

other competitors in that round must continue their turns to complete assembly of the meter to have a qualifying time of record.

22. The OFFICIAL TIME for the competitors' turns will be the raw time to assemble the meter plus any penalty seconds the Judges deem necessary after testing the meter.

23. Three (3) Official Timers will time each contestant during each heat, and the middle time of the three (3) will be the official raw time.

24. The winner will be determined by the best OFFICIAL TIME as determined by a "head to head" heat following two (2) preliminary rounds and one (1) semi-final round. The fastest four OFFICIAL TIMES from the first two preliminary rounds will be eligible to compete in the semi-finals. The two fastest OFFICIAL TIMES from the semi-final round will be eligible to compete for the championship. The fastest OFFICIAL TIME in the championship round will determine the Meter Madness champion.

WHAT WINNING COMPETITOR RECEIVES

25. The AWWA ACE Meter Madness champion is automatically eligible for the next year's AWWA ACE Meter Madness Competition as a special entry and is not counted as the Section entry.

26. The Championship Competitor will:

- a. Be presented with a team trophy to keep at the close of the competition.
- b. May be featured in AWWA publications and will be listed in the Meter Madness Hall of Fame on the AWWA website.
- c. Be reimbursed for expenses outlined by the official AWWA Returning Champion Guidelines, to return for the next AWWA ACE Meter Madness Competition at ACE the following year. (In general, expense reimbursement covers transportation costs to and from the convention site, hotel, and meals).

27. The Second, Third, and Fourth-place competitors will:

- a. Be presented with a trophy to keep at the close of the AWWA ACE Meter Madness Competition.
- b. May be featured in AWWA publications.

COMPETITION

28. There is no such thing as a faulty meter. All meters were received in good working order prior to the meter madness competition. THE METER MUST REGISTER WHEN TESTED OR A PENALTY WILL BE INCURRED as described in Penalties 45.

29. All meters utilized in the meter madness competition are new or nearly new and in perfect working condition prior to disassembly.

- a. Any tools, equipment, and other supplies provided for this competition that are broken will be considered to be broken by neglect of the individual and will not be replaced during their turn.

30. The location and the size of the space for the Meter Madness competition will be determined at the discretion of AWWA and dependent on the layout of the facility. The work area for the Meter Madness Competition shall be large enough to accommodate all competitors and judges and their equipment. Equal space must be provided for each individual. Every effort must be made to provide equal work opportunities for all competitors. A minimum of 10' clear area in all directions around the tables shall be provided to allow the officials to roam freely in officiating with competitors. This clear area will also help to provide a safety area between the spectators and the competitors to protect from any tools or materials that may accidentally slip from someone's grasp. In the case of multiple competitors competing at the same time, all work shall be conducted on a suitable size table to provide each of the competitors adequate room to move about freely to assemble their meters

without crowding. It is preferred, but not required, to have some type of partition between competitors to secure their individual work.

31. Meters will be totally disassembled with the exception of the sealed magnetic drive assemblies and the registers. All the meters used by every competitor will be identical.

32. No competitor will be allowed to examine the contents of the bucket prior to the start of the contest. A meter fully assembled may be examined by each competitor if he/she chooses. Each bucket shall always contain the total parts required for complete assembly of the meter.

33. The competitor shall be positioned immediately in front of the bucket of parts on the table at the instruction of the head official just prior to the start of the event. All necessary tools will be pre-positioned on the table alongside the bucket prior to the start. No meter parts may be handled by the competitors prior to the start of the event, but they will be allowed to position the tools where they want. Both hands must be empty and not touching any tool, bucket or competition table just prior to the start of the event.

EXTRA METER PARTS - The total contents of extra parts shall be exactly the same for each individual but shall consist of a random number of miscellaneous extra parts. These parts may be related or unrelated to the meter utilized in the competition and may be metallic or non-metallic. The intent is to require the competitor to thoroughly know the total parts required to reassemble the meter utilized in this competition.

EQUIPMENT & MATERIALS

34. All equipment is to be provided by a predetermined in-kind sponsor or AWWA.

35. Meters shall be of the type complying with AWWA C700, C-710, and C-708, "Cold-Water Meters – Multi-jet Type, Bronze Main Case." The size shall be 5/ 8" x 3/ 4". Each year the meter manufacturer and model may vary and will be announced in adequate time prior to the competition.

36. Tools provided include:

- a. 1 - 1/2" Box End Wrench
- b. 1 - Flat-Head Screwdriver - 4" x 3/16"
- c. 1 - Special Tool (IF REQUIRED BY CERTAIN METERS)

JUDGING

37. The officiating and supervision of each event shall be the responsibility of the head official who shall have extensive experience in water meter maintenance and total familiarity with the type and manufacturer of the meters to be used in the competition.

38. The number of competitors for each round shall be limited to the space available for the competitors to perform adequately or to the number of officials available for each round.

39. The officials shall be responsible for timing the events with the head official being the one to announce the START and STOP of the event. Each competitor's time as recorded by the official, plus any penalties accrued, shall be used to determine the official time for each contestant. The head official shall be in charge of the competition and after consulting with the other officials of any infraction of the rules shall make the ruling as required by the circumstances for any penalties to be assessed.

40. The head official shall see that all tools, materials, and competitors are in the required positions prior to starting the event. He/She shall also ensure the work area is free from any obstructions or spectators.

41. The officials shall watch for safety violations during the actual events and assess appropriate penalty times as required. During the time of the event not taken up by the actual competition, the officials shall see that all preparations for the event are accomplished in a safe manner.

42. No timing official will be assigned to a contestant who works for the same organization.

SAFETY & CONDUCT

43. Standard water utility safety practices will be observed at all times during the competition. Any flagrant violations will be penalized by the addition of time to the competitor's raw time as described in Procedural Violations.

44. Unsportsmanlike behavior will not be tolerated and could result in individuals or teams being disqualified from the competition. Judges, competitors, and/or volunteers may not use, possess, or be under the influence of alcohol and/or illegal substances whilst performing duties related to the competition. Violations of this will be determined at the discretion AWWA Staff and the Meter Madness Subcommittee Chair.

45. Competitors will not be allowed to participate if they are wearing articles of clothing or using equipment plainly displaying offensive language, slogans, or graphics.

46. Safety equipment will be required to be provided by each competitor. Competitors without proper personal protective equipment as described below will not be allowed to compete until they have obtained the proper personal equipment in a reasonable amount of time during the competition. The safety equipment required of each competitor shall be:

a. Foot Protection shall be required to be worn by both team members (men and women) and shall conform to the **ASTM F243-17 - Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear** (incorporates ANSI Z41.1 by reference). Sneakers and dress shoes that meet this standard are also allowed.

47. Children under the age of 16 entering the Exhibit Hall during show hours need to be accompanied by a parent or guardian at all times. No one under the age of 16 is allowed in the Exhibit Hall area during move-in, move-out, or non-show hours. A parent or guardian assumes all risks and responsibility for the safety of his or her child. Anyone 12 years or older will require a badge to enter the Exhibit Hall.

48. All elements of the competition must remain within the confines of the designated area, and at a noise level not offensive to nearby exhibitors. Speakers and other sound devices should be positioned so as to direct sound into the competition space rather than into the aisle. Sound and noise may not exceed 90 decibels, management of volume levels will be the responsibility of AWWA staff. Announcer must terminate any form of attention-getting device or presentation when crowds jam aisles or infringe upon other exhibitors' areas.

PENALTIES

49. Various penalties will be assessed by the head official for any infraction of the rules as described herein or for any flagrant violation of normal safety practices.

50. The penalties will be in the form of a predetermined number of seconds added to the total time of the team's event time which will then be the OFFICIAL TIME of that event.

51. In the event of any disagreement with a penalty decision, the head official's decision is final.

52. There will be NO INSTANT REPLAY allowed for reversing any decision after the head official has made a final determination of any infraction in these rules.

53. Penalties shall be:

- a. Safety violation such as throwing of tools, PPE penalty, etc. (+10 seconds each)
- b. Procedural violation by any competitor. This is a general penalty for actions of the competitor that may not specifically be covered in these rules but are of sufficient gravity to the Judges as to warrant a penalty. (+10 second penalty)
- c. Leaking connection, barely oozing water and just discernable to the judges (+4 seconds each)
- d. Slow, obviously dripping connection (+6 seconds each)
- e. Squirting, continuous leaking connection (+8 seconds each)
- f. Meter not properly put together and a part too loose (other than the bottom plate bolts described under Penalties h.) or falls off (+10 seconds each)
- g. Meter fails to register flow through meter when tested (+10 seconds)
- h. Bottom plate bolts can be loosened without a tool (+10 seconds each)
- i. Violation of touching the bucket early (+10 second penalty)
- j. Violation of touching anything on the competition table AFTER hands have gone up. (+10 second penalty)

Master Meter, Inc. is pleased to be this year's sponsor for the Meter Madness competition. This document is designed to provide you with a breakdown of all the parts supplied for competition meters. Have fun and we wish you the best of luck.



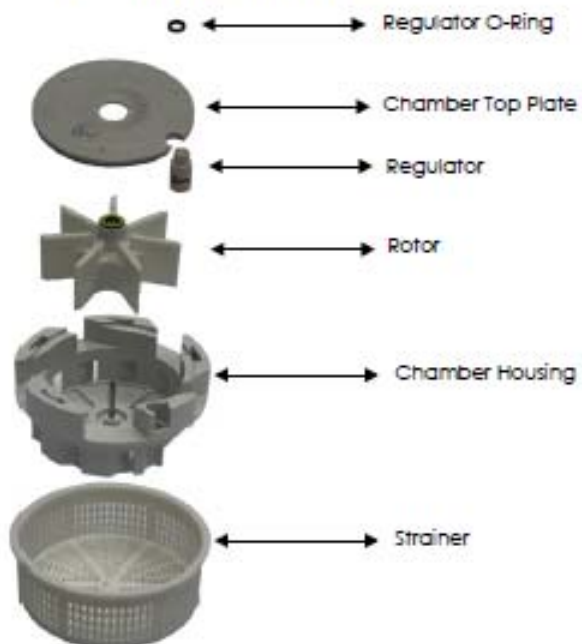
Item	Description	Quantity
A	Register Assembly and Locking Pin	1
B	Meter Body	1
C	Regulator O-Ring	1
D	Measuring Chamber	1
E	Sealing Plate	1
F	Sealing Plate O-Ring	1
G	Washer Head Bolt	4
H	Bottom Plate	1



Meter Assembly Instructions

This guide is designed to assist you in the assembly of the Master Meter Multi-jet (BLMJ) meter used in the 2018/2019 Meter Madness Regional and National competitions. These steps do not have to be followed in this precise order for the competition. Use any tactical advantage you find, within the rules, to decrease your assembly time and increase your chances of winning the competition.

BLMJ Chamber Components



BLMJ Chamber Complete



NOTE: The strainer/chamber O-Ring is not needed for competition. If you receive this gasket with your meter, you may discard the gasket.

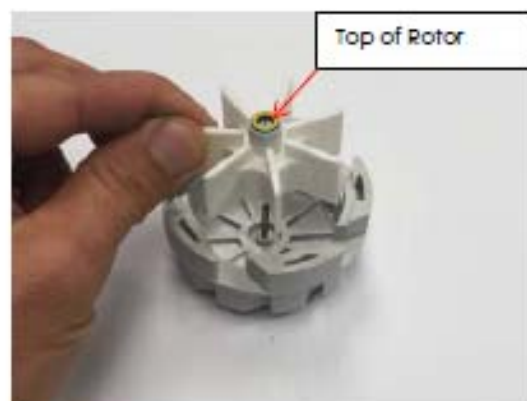
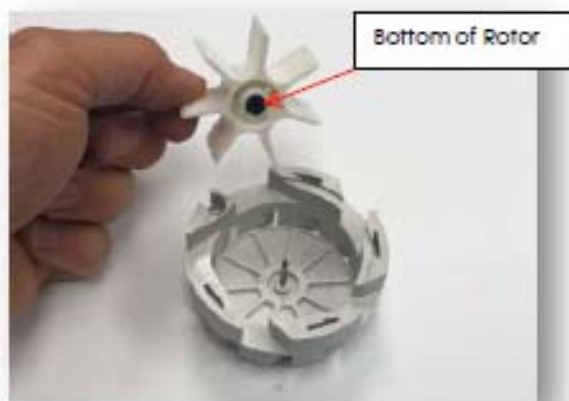


Meter Assembly

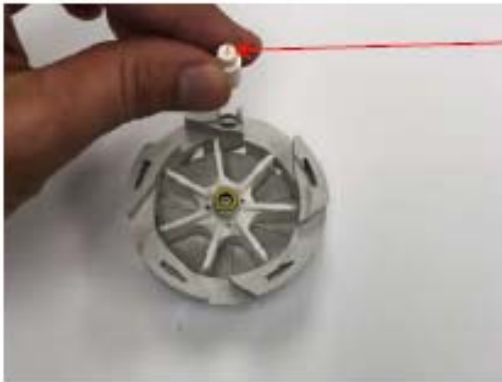
- 1) Insert the Regulator O-Ring into the body.
 - Note, Master Meter recommends placing the O-Ring in the body before the event begins.



- 2) Insert Rotor into Chamber Housing. Note orientation below.



- 3) Insert the Regulator into the Chamber.



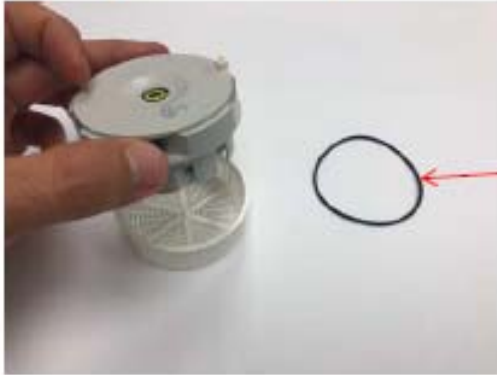
Note: The Regulator has a direction arrow and screw slow, as shown in this image. The direction that the arrow points is not important for the competition. Just be sure this part faces up when inserting into the chamber.

- 4) Insert the Chamber Top Plate onto the Chamber Housing. Listen for a "click" as the top plate locks in place.





5) Insert the Chamber into Strainer.



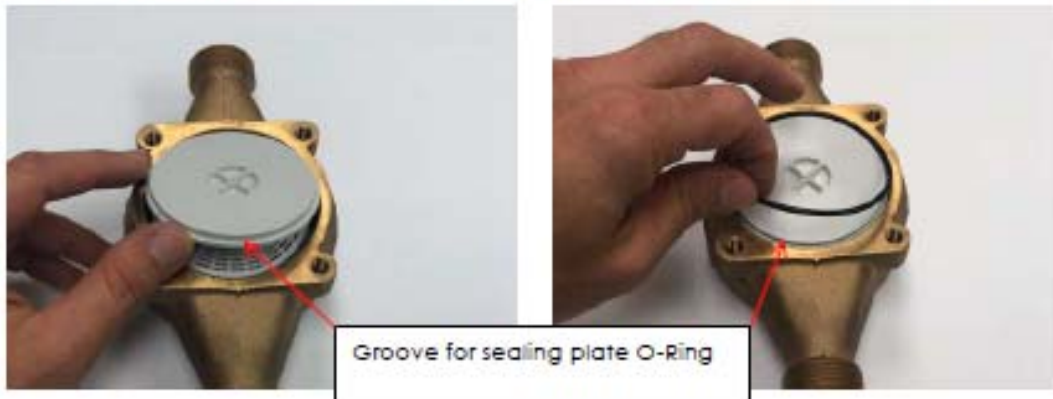
NOTE: The strainer/chamber O-Ring is not needed for competition. If you receive this gasket with your meter, you may discard the gasket.

6) Insert the Chamber and Strainer into the Meter Body. Be sure to line up the regulator with the hole in the meter body. If the O-Ring is not properly seated, or if it is missing, the meter will leak.





- 7) Install Sealing Plate and Sealing Plate O-Ring. If Sealing Plate is installed upside down, the O-Ring will not line up. Pay attention to install in the correct direction with the groove pointing out.



- 8) Place Bottom Plate onto meter body and secure in place with the supplied bolts. Tighten with a $\frac{1}{4}$ " wrench.





- 9) Turn meter over and place register on bayonet at an approximate 45° angle as shown in the image on the left.

Secure register in place by turning clockwise as shown in the image on the right.



Have fun and we wish you the best of luck.

SPLISH SPLASH

INTRODUCTION

I-1. This event is to demonstrate and recognize the skills of utility operators by simulating a typical repair to a water service “On the fly”.

I-2. All contestants shall be VA AWWA members. This membership may be an individual membership, as an Active or Affiliate Member of VA AWWA, or contestants may be regular employees of a Utility Member or Organization Member of VA AWWA.

I-3. Each Utility may enter two (2) contestants. The exception will be when a utility has the reigning current VA AWWA Splish Splash champion. In this case the utility may enter the reigning champion plus two contestants. Entry is limited to the first twenty-five (25) registered contestants.

GENERAL

G-1. Contestants shall report to the Event Coordinator when called, be ready with all safety equipment and ready to compete.

G-2. The service line to be repaired shall be Type K copper tubing, 12’ in length at the beginning of the event connected to a water supply, under pressure and crimped.

G-3. The water pressure at the beginning of the event shall not exceed 60 psi.

G-4. Contestants may turn the crimped end of the copper pipe to a position that best suits their style before the start signal.

G-5. Contestants may place curb stop where it best suits his style, but may not adjust the flare nut after the judge has checked it.

G-6. Contestants shall select tools from a stock of tools provided. Contestants are responsible for gathering all tools needed to perform the event. Contestants may place tools in a position that best suits their style.

G-7. At the “Go “ signal, contestants will cut and flare the pipe “On the fly”, then install a ¾” curb stop to complete the repair.

G-8. Each contestant will be given a curb stop just before starting his run. Contestants may not work valves on curb stop, but will be allowed to open and close once to check tension. The curb stop shall be in the open position at the start of the event.

G-9. Contestants are required to use a pipe wrench to tighten the flare nut on the curb stop. The flare nut must be completely tightened. Flare nut will be inspected at completion of each run. If the flare nut can be unscrewed by hand or if flare nut and curb stop will turn on copper pipe, an additional safety penalty will be assessed. The intent is to simulate an actual field repair as closely as possible. Failure to comply will result in a procedural violation.

G-10. Time will stop and all work shall cease when the curb stop is closed.

G-11. Contestants will have two attempts with the lowest of their two times being the official time. The two attempts will be performed consecutively. All contestants will compete in each round, however contestants will be stopped when their time has exceeded the established third place time.

G-12. The winner will be the contestant with the fastest time plus any penalty time.

G-13. In the event of a tie, a one-time rerun of the event by the tied contestants will be run.

SAFETY

S-1. All safety equipment shall be required to be provided by each contestant. Contestants will not be allowed to compete if missing any of the required safety equipment.

S-2. Safety equipment required for all participants shall be:

- a. Head protection for ALL contestants shall be worn during the event. The head protection (hard shells) shall conform to American National Standard Safety Requirements for Industrial Head Protection Z89.1-1969. If a hard hat falls, the hat must be replaced as soon as possible or a safety violation will be imposed. Head protection must be worn in accordance with manufacturer's recommendations.
- b. Eye protection (glasses or goggles) is required to be worn by all contestants during the. Eye protection must conform to American National Standard for Occupational and Education Eye and Face Protection Z87.1-1968.
- c. Gloves are required to be worn by all contestants. Gloves shall be full-fingered and suitable for construction related tasks. Lab type gloves such as latex material and gloves without complete fingers are not acceptable for the contest. Sport gloves with full fingers are allowed.
- d. Foot protection shall be required to be worn by all contestants and shall conform to American National Standard for Men's Safety Toe Foot Wear, Z1.1-1967. Sneakers or dress type shoes meeting ANAI Z41.1-1967 are also allowed.
- e. Short-sleeved shirts and long legged trousers are required to be worn by all contestants during the event.

OFFICIATING

O-1. The Officiating of each event shall consist of three (3) or more persons with one of the Officials designated as the Head Official. The Head Official shall be in charge of the complete contest. The Head Judge may appoint another Official to make a ruling as required by the circumstances for any penalties. If there is a disagreement after consulting with other officials on any infraction of the rules, the Head Official shall make the final ruling.

O-2. The officials shall be responsible for timing the event.

O-3. There will be NO INSTANT REPLAY allowed for reversing any decision after the Head Official has made a final determination on any infraction in these rules.

NOTE: This contest is officiated by very competent officials and human judgment must enter into the contest at various times. All officials strive for fairness, in their judging duties so that all contestants are judged as equally as possible. FAIR AND EQUAL TREATMENT FOR EACH AND EVERY CONTESTANT is the goal of this contest. There is no intention to provide anyone with an advantage. This contest is for FUN and ENJOYMENT of the participants and spectators. Let's keep it that way!

EQUIPMENT & MATERIALS (to be provided by VA AWWA)

E-1. Brass curb stops $\frac{3}{4}$ " Mueller (H-B25204), Ford (B-22333) or McDonald (6100) to be provided for each run. Curb stops provided shall be of the same manufacturer and model for each contestant.

E-2. Type K copper tubing, $\frac{3}{4}$ ", 12' – 15' in length at the beginning of the event.

E-3. Pipe wrenches, two (1), 14" REED Manufacturing Company (RW-14) or RIDGID (31020).

E-4. Hammers, one (1), shall be a brass, 3 lb hammer for flaring, Mueller Co. (H-18025) or Reed Manufacturing Company (HAM3, 3lb, 06088).

E-5. Adjustable (Crescent-type) wrenches, one (1), 12", Reed Manufacturing Company (CW 12) or RIDGID (86917).

E-6. Tubing cutters, one (1), heavy duty, Reed Manufacturing Company (T-20) or RIDGID (32930). The contestant shall examine the cutting wheels before each run to determine their condition and ask the Officials for a replacement if necessary. **THESE ARE THE ONLY CUTTERS ALLOWED.**

E-7. Flaring tools, one (1), Mueller Company (H-18005) or one (1), Reed (PRHF3 Item Code 06073)

E-8. No lubrication of any type will be allowed on the end connectors, threads, or flaring tool.

PENALTIES

P-1. Various penalties will be assessed by the Head Official or designee for any infraction of the rules as described herein or for any flagrant violation of normal safety practices.

P-2. The penalties will be in the form of a predetermined number of seconds added to the total time of the team's event that will then be the **OFFICIAL TIME** of that event. Each of the contestant's two events will be considered separate for penalty points.

P-3. Contestants without proper personal safety apparel as prescribed above will not be allowed to compete until they have obtained the proper apparel in a reasonable amount of time during the contest.

P-4 Penalties shall be (in seconds):

- a. Leaking connections, barely oozing water and just discernable to the Officials, +10 each
- b. Slow, obviously dripping connection, +20 each
- c. Squirting, continuous leaking connection, +30 each
- d. Crimp in service line that will not pass $\frac{1}{2}$ " marble, +10 each
- e. Safety violation, +10 each
- f. Procedural Violation by any member of the Team +10
- g. Using the side of the hammer head to flare =10

P-5. If the curb stop blows off of the pipe after time is stopped, the contestant's run is **DISQUALIFIED**.

P-6. For any disagreement with a penalty decision, the Head Official's decision is final.

BURIED TREASURE

INTRODUCTION

I-1. The intention of the event is to recognize the profession of underground utility facility locating and to demonstrate the safety, skills and ongoing educational efforts associated with high quality workmanship.

I-2. Contestants shall be VA AWWA members. This membership may be an individual membership, as an Active or Affiliate Member of VA AWWA, or be a regular employee of a Utility Member or Organization Member of VA AWWA.

I-3. Each Utility may enter only one (1) locator. The exception will be when a utility's locator is the current reigning VA AWWA State Champion. In this case a utility may enter another (second locator) in the contest with full privileges and rights as all other locators. There is no limit to number of contestants.

I-4. Contestants will perform a locate of an underground facility in the locate area, then measure and document their locate in several spots from a given reference point. The contestant with the most accurate accumulative score will be declared the winner.

GENERAL

G-1. Contestants are required to attend the mandatory contestants meeting to be held at the hotel.

G-2. Contestants shall report to locate site 15 minutes prior to announced start time and register with the Event Coordinator.

G-3. All contestants will be hidden in an area with no view of the event area. Contestants will be called out one at a time to perform their locate. At no time while waiting their turn or during the event shall a contestant be allowed to use a cell phone or pager.

G-4. The facility to be located shall be a 12 gauge coated copper wire, typically used as a tracer wire with plastic water piping.

G-5. One end of the wire shall be accessible outside of the locate area to allow direct connection for performing a conductive trace. A ground rod will be installed for use at the contestant's discretion.

G-6. The wire shall run in a random pattern through the locate area. The wire may cross some or all of the strings and will exit the event area.

G-7. The locate area shall have a reference system set up of a hub in the center of the area with eight (8) spokes of strings running toward the outer perimeter of the locate area. Strings shall be approximately six (6) inches above the ground. Each string shall have a color designation as shown on the attached event template. The locate area shall have a diameter of thirty feet (30').

G-8. Contestants will be provided flags to mark the location of the wire.

G-9. At the "Go" signal, contestants will have five (5) minutes to connect to the access point, locate the wire, place flags where the wire crosses each reference string and document measurements on the provided

template.

G-10. A tape measuring instrument will be provided at the locate area.

G-11. Contestants will be provided a template of the event area and will measure and record where they located the wire crossing each string.

G-12. When the contestant has completed the event, they must indicate to the judge to stop the time by saying **“I am finished”**. Only then will the clock stop. Time will be considered for tie breaking only.

G-13. No locating may be performed or measurements taken after the judge calls “Time”. Any measurements not recorded on the event template will incur penalty.

G-14. Contestant’s shall certify the information on their event template and sign the template.

SCORING

S-1. Contestants will measure the location of the wire at each string crossing from a given reference point and record the results on the provided event template. Measurements can be taken to the nearest 1/8”.

S-2. Any differences in the contestant’s measurements and the actual measurements at each crossing will be added together for a total accumulative difference.

S-3. Penalty distances may be assessed for infractions spelled out in the penalty section of these rules.

S-4. The contestant with the lowest accumulative difference plus any penalty distance will be declared the winner.

PENALTIES

P-1. Penalties will be assessed as distance added or disqualification.

P-2. Contestants not reporting to the locate site before the start of the event will be disqualified.

P-3. At no time while waiting their turn or during the event shall a contestant be allowed to use a cell phone or pager. Use of cell phones/pagers will result in a disqualification.

P-4. Breaking a string: disqualification.

P-5. Recording a measurement on a string that the wire does not cross: spoke length will be added.

P-6. Not recording a measurement on a string that the wire does cross: spoke length will be added.

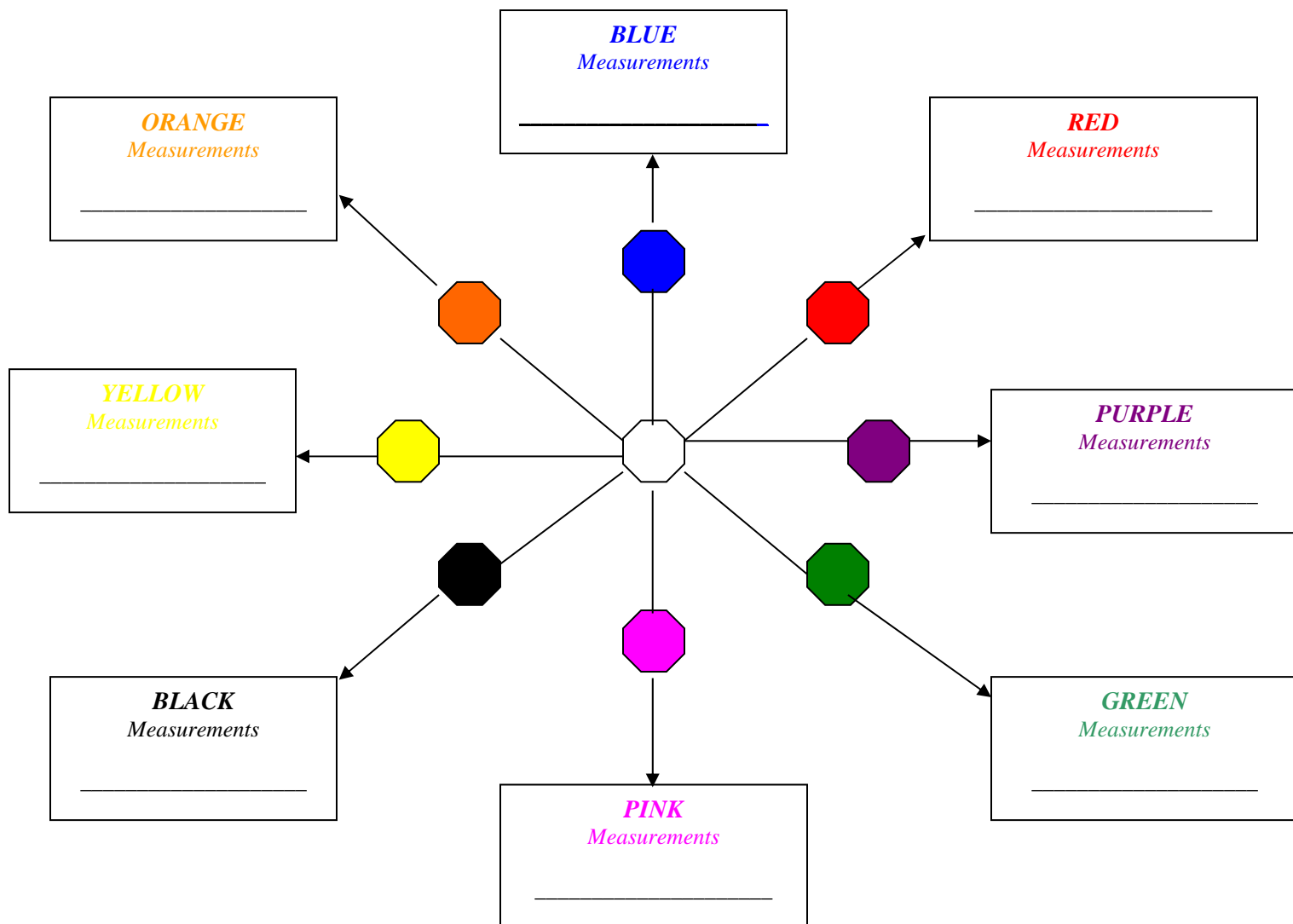
JUDGING

J-1. The event will consist of a Head Judge and Alternate Judges. The Head Judge shall oversee the entire event.

J-2. No judge shall solely judge a contestant from his or her utility. Alternate Judges will be available for such scenarios.

J-3. In the event of a dispute, the decision of the Head Judge is final.

EVENT TEMPLATE



(All measurements to be recorded in inches, i.e., 52 $\frac{3}{4}$ ")

Contestant _____ Time _____

Contestant's Signature _____

Judge's Signature _____

DISCLAIMER *Judges & Contestants*

**BY SIGNING THIS
DOCUMENT, I
HEREBY CERTIFY
THE
MEASUREMENTS
INDICATED ARE
FINAL AND
UNDERSTAND
CHANGES WILL NOT
BE ALLOWED**

AWWA ACE Competitions - Rules and Regulations HYDRANT HYSTERIA

Revised September 2018

INTRODUCTION

1. The Competition is a measure of the team's skill at assembling a hydrant quickly, totally and accurately. All parts will be assembled in the proper manner and their assembled hydrant shall be tested by the judges for its ability to operate correctly.

2. Each team will be required to completely assemble a hydrant commonly utilized by a utility. The event is timed with multiple teams assembling a hydrant at the same time.

3. At the competition there will be three (3) or more (depending on number of competitors) fire hydrants that will be used by the competitors. While one or more teams are competing, the next team will be staging at the next hydrant.

4. The AWWA ACE Hydrant Hysteria Competition will take place over two days, with the preliminary round beginning on the first day of the competition (typically day 2 of the Exhibit Hall Schedule) and concluding on the second day of the competition (typically day 3 of the Exhibit Hall Schedule). Finals will be held on the second day of the competition (typically day 3 of the Exhibit Hall Schedule). The location will be announced to all teams entered in the contest each year before the beginning of the Annual Conference.

DISCLAIMER

5. AWWA specifically does not endorse products manufactured by sponsors and takes no position concerning the adequacy of such products or their compliance with any AWWA Standard.

6. Each competitor will be required to complete the proper waiver and registration documentation prior to competing in any event. **Verification of eligibility will be required at the time of registration.**

7. This competition is officiated over by very competent officials who are striving for fairness in their judgement for the events so that all competitors are judged as equally as possible. Fair and equal treatment for each competitor is the goal of this competition. There is no intention to provide anyone with an advantage. This competition is for the fun and enjoyment of the participants and spectators.

8. In order to be eligible, Sections must verify that each person is authorized to compete. Details regarding eligibility are noted in the next section.

9. Hydrant Hysteria team members or team coaches who have participated as a competitor or coach are eligible to join the Hydrant Hysteria Subcommittee. Current team members and coaches are ineligible to serve on the Hydrant Hysteria Subcommittee. This is to eliminate perceived conflicts of interest.

ELIGIBILITY & MEMBERSHIP

10. Each Hydrant Hysteria Competition team shall consist of no more than 2 competitors and a coach. The two competitors may consist of two males or two females. The coach may be either male or female.

11. Each AWWA Section may enter one (1) men's team and one (1) women's team in the AWWA ACE Preliminary Hydrant Hysteria Competition. Multi-State/Provincial Sections may enter up to two (2) men's teams and up to two (2) women's teams. The ACE Local Host Section is permitted to

send up to two teams. The Section with the returning champion team is permitted to send one additional team. If the ACE Local Host Section also has the returning champion, they are permitted to send a total of three (3) teams.

12. Each AWWA Hydrant Hysteria Competition participant must be a current AWWA member from the time of registration through the ACE event. This membership may be an individual membership, or the participant can be a regular employee of an AWWA Utility Member or Service Provider Member. Each Section is responsible for verifying the membership status of each participant before entering them into the competition.

13. Only AWWA Section teams that have qualified by competing in a Section Hydrant Hysteria competition are allowed to enter the AWWA ACE Hydrant Hysteria Competition. If there are not enough teams for a Section to hold a Hydrant Hysteria competition at the Section level, a team may enter the AWWA ACE Hydrant Hysteria competition with approval from the Section that they are representing.

REGISTRATION

14. To enter, follow the instructions on the Hydrant Hysteria web page. **No registration is available onsite. To allow proper determination of the number of rounds required, AWWA must be informed by the Sections before May 1 of any anticipated late team registrations each year.** Each competitor must attend the Mandatory Competitor's Meeting at the Staging Area prior to the start of the competition. Among other things, the timing and order of competition will be determined at this meeting. Only competitors are allowed at this meeting. This meeting is not attended for coaches.

15. Each participating team member will receive a complimentary **ACE Exhibits Only Registration**. Each competitor is allowed one (1) complimentary **Spouse/Guest Registration** granting access to the Exhibit Hall during official Exhibit Hall hours.

16. Each competitor and coach must register themselves and sign their own waiver. Please ensure that all members of the team register with the same team name.

17. Each team must make their own travel and lodging arrangements. AWWA will not make travel or lodging arrangements for any team. AWWA does not reimburse travel expenses (airfare, lodging, food) for any team. Please check with your Section on travel reimbursements.

HOW YOU WIN

18. A time period of no more than ten (10) minutes shall be allowed for the judges to disassemble the hydrant. Once the judges have inspected all the parts, the competitors will be asked to assume the starting position of their choice. The head official will count down to "GO" to initiate the start of the competition. Once the team has completed assembling the fire hydrant, the competitors will raise their hands to signify that they are finished and the judges will examine and open the hydrant to check for operability.

19. The **Official Time** for the Competitor's turns will be the raw time to assemble the hydrant. The Competitor with the fastest **Official Time** registered shall be declared the winner.

WHAT WINNING TEAM RECEIVES

20. The AWWA ACE Annual Hydrant Hysteria Champion is automatically eligible for the next year's AWWA ACE Hydrant Hysteria Competition as a special entry and is not counted as the Section entry.

21. The Championship team (including coach) will:

- a. Be presented with a team trophy to keep at the close of the competition.
- b. May be featured in AWWA publications and will be listed in the Hydrant Hysteria Hall of Fame on the AWWA website.
- c. Be reimbursed for expenses outlined by the official AWWA Returning Champion Guidelines, to return for the next AWWA ACE Hydrant Hysteria Competition at ACE the following year. (In general, expense reimbursement covers transportation costs to and from the convention site, hotel, and meals).

22. The Second, Third, and Fourth-place teams will:

- a. Be presented with a trophy to keep at the close of the AWWA ACE Hydrant Hysteria Competition.
- b. May be featured in AWWA publications.

COMPETITION

23. There is no such thing as a faulty fire hydrant. All fire hydrants were received in good working condition prior to the hydrant hysteria competition. THE HYDRANT MUST WORK, OR A PENALTY WILL BE INCURRED. See no.27.

24. All hydrants utilized in the hydrant hysteria competition have never been operated, come straight from the manufacturer, and are verified to be in perfect working condition prior to disassembly.

- a. Any tools, equipment, and other supplies provided for this competition that are broken will be considered to be broken by neglect of the team and will not be replaced during their turn.
- b. Teams will be able to ask to grease (Food Grade) the hydrant before each run if the judge has determined it is warranted.

25. The location and the size of the space for the Hydrant Hysteria competition will be determined at the discretion of AWWA and dependent on the layout of the facility. The work area for the hydrant hysteria competition shall be large enough to accommodate all competitors and judges and their equipment. Equal space must be provided for each team. Every effort must be made to provide equal work opportunities for all competitors. A minimum of 10' clear area shall be provided between the working area and the spectators to afford safety from tools or materials that may accidentally slip from someone's grasp during the competition.

In the case of multiple competitors competing at the same time, all work shall be conducted on a suitable work area to provide each of the competitors adequate room to move about freely to assemble their hydrants without crowding. It is preferred, but not required, to have some type of partition between competitors to secure their individual work.

26. Fire hydrants will be totally disassembled by the Judges and Volunteers down to the lower barrel and shoe. All the hydrants used by every competitor will be identical.

27. All competitors will be allowed to examine all the hydrant parts for five (5) minutes prior to the start of the competition. Each fire hydrant shall always contain the parts needed to completely assemble the fire hydrant.

28. The competitors will be allowed to position their tools and the hydrant parts where they want, with the stipulation that no tools or parts can be touching, and nothing may be placed inside the

frame of the hydrant. Both hands must be empty and not touching the hydrant or any tools when the competition begins.

29. Competitors will be allowed two runs during the preliminary round of the competition when time allows. There will only be one round during the final round.

EQUIPMENT & MATERIALS

30. All equipment is to be provided by AWWA In Kind Material Sponsors, and the Local Host for each hydrant.

31. Fire hydrants shall be the type complying with AWWA C502, "Dry Barrel Hydrant". The size of the hydrant can either be 4 ½" or 5 1/4" barrel hydrant depending on which hydrant manufacturer is being used. Each year the hydrant manufacturer and model may vary and will be announced in adequate time prior to the competition.

32. The hydrant that will be used in the ACE19 competition will be the M&H Hydrant.

33. Tools provided include:

- a. 2 - 14" pipe wrenches
- b. 2 – ½" socket wrenches
- c. 1 – 15/16" open end wrench
- d. 1 – ¾" open end wrench
- e. 1 – 15/16" socket
- f. 1 – ¾" socket
- g. 1 – standard hydrant wrench
- h. 1 – hydrant seat wrench
- i. 1 – top hydrant wrench
- j. 1- T-Handle wrench

JUDGING

34. The officiating and supervision of each event shall be the responsibility of the head official who shall have extensive experience in hydrant maintenance and total familiarity with the type and manufacturer of the hydrant to be used in the competition. There shall be three (3) officials for each team, which could amount in a total of up to twelve(12) judges overseeing a total of four (4) competition hydrants.

35. The number of teams for each round shall be limited to the space available for the competitors to perform adequately or to the number of officials available for each round.

36. The officials shall be responsible for timing the events, with the Head Official being the one to announce the START and STOP of the event. Each team's time as recorded by the official, plus any penalties accrued, shall be used to determine the official time for each team. The head official shall be in charge of the competition and after consulting with the other officials of any infraction of the rules shall make the ruling as required by the circumstances for any penalties to be assessed.

37. The head official, determined by the Hydrant Hysteria Subcommittee Chair, shall see that all tools, materials, and teams are in the required positions prior to starting the event. He/She shall also ensure the work area is free from any obstructions or spectators.

38. The officials shall watch for safety violations during the actual events and assess appropriate penalty times as required. During the time of the event not taken up by the actual competition, the officials shall see that all preparations for the event are accomplished in a safe manner.

39. No judge will be assigned to a team who works for the same organization the team represents.

40. There are three (3) judges per hydrant: a. Timing Judge – the Timing Judge is responsible for recording the three (3) times and any penalties that may be assessed.

b. Umpire – the Umpire is responsible for checking all the bolts and caps to make sure that they are tight by using a hydrant wrench.

c. Operations Judge – the Operations Judge is responsible for testing the hydrant and confirming the hydrant was assembled correctly.

41. The official time will stop when both competitors have placed their tools on the ground and have both raised their hands.

SAFETY & CONDUCT

42. Standard water utility safety practices will be observed at all times during the competition. Any flagrant violations will be penalized by the addition of time to the competitor's raw time as described in Procedural Violations.

43. Unsportsmanlike behavior will not be tolerated and could result in individuals or teams being disqualified from the competition. Judges, Competitors, and/or volunteers may not use, possess, or be under the influence of alcohol and/or illegal substances while performing duties related to the competition. Violations of this will be determined at the discretion of AWWA Staff and the Hydrant Hysteria Competition Subcommittee Chair.

44. Teams will not be allowed to participate if they are wearing articles of clothing or using equipment plainly displaying offensive language, slogans, or graphics.

45. Safety equipment will be required to be provided by each team member. Teams without proper personal protective equipment as described below will not be allowed to compete until they have obtained the proper personal protective equipment in a reasonable amount of time during the competition. The safety equipment required of each team member shall be: a. Head protection for both team members shall be worn during the event. The head protection (hard hats) shall conform to the **American National Standard Safety Requirements for Industrial Head Protection (ANSI Z89.1-2014)**. If a hard hat falls or is knocked off a team member, the hat must be replaced on the team member's head as soon as possible or a safety violation will be imposed. Head protection must be worn in accordance with the manufacturer's recommendations and is not to be worn backwards.

b. Eye protection (Glasses or Goggles) are required to be worn by both team members during the hydrant competition. Eye protection must conform to the **American National Standard for Occupational and Education Eye and Face Protection (ANSI Z87.1-2015)**.

c. Gloves are required to be worn by both team members. Gloves shall be full-fingered and suitable for construction related tasks. Lab type gloves, such as latex material, and gloves without complete fingers are not acceptable for the competition. Sport gloves with full fingers are allowed.

d. Foot Protection shall be required to be worn by both team members (men and women) and shall conform to the **ASTM F243-17 - Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear** (incorporates ANSI Z41.1 by reference). Sneakers and dress shoes that meet this standard are also allowed.

46. Long or short sleeved shirts and long-legged trousers are required to be worn by all members of the team during the event. No tanks or cutoff shirts, and no shorts are allowed.

47. No personal bags will be allowed on the floor.

48. Children under the age of 16 entering the Exhibit Hall during show hours need to be accompanied by a parent or guardian at all times. No one under the age of 16 is allowed in the Exhibit Hall area during move-in, move-out, or non-show hours. A parent or guardian assumes all risks and responsibility for the safety of his or her child. Anyone 12 years or older will require a badge to enter the Exhibit Hall.

49. All elements of the competition must remain within the confines of the designated area, and at a noise level not offensive to nearby exhibitors. Speakers and other sound devices should be positioned so as to direct sound into the competition space rather than into the aisle. Sound and noise may not exceed 90 decibels, management of volume levels will be the responsibility of AWWA staff. Announcer must terminate any form of attention-getting device or presentation when crowds jam aisles or infringe upon other exhibitors' areas.

PENALTIES

50. Various penalties will be assessed by the head official for any infraction of the rules as described herein or for any flagrant violation of normal safety practices.

51. The penalties will be in the form of a predetermined number of seconds added to the total time of the team's event time which will then be the OFFICIAL TIME of that event.

52. In the event of any disagreement with penalty decision, the head official's decision is final.

53. There will be NO INSTANT REPLAY allowed for reversing any decision after the head official has made a final determination of any infraction in these rules.

54. Penalties shall be: a. Safety violation such as throwing of tools, PPE penalty, etc. (+10 seconds each)

a. Safety violation such as throwing of tools, PPE penalty, etc. (+10 seconds each)

b. Procedural violation by any member of the team. This is a general penalty for actions of the team that may not specifically be covered in these rules but are of sufficient gravity to the Judges as to warrant a penalty. (+10 second penalty)

c. Hydrant parts not assembled correctly:

i. Loose or missing hydrant bolt (+5 seconds each)

ii. Loose or missing nozzle caps (+5 seconds each)

iii. Seat assembly not tight or screwed in all the way (+10 second penalty)

iv. Loose hold down nut on weather cap or No attempt made with tool (+10 second penalty)

d. Hydrant is not completely facing forward (+10 second penalty)

e. Hydrant fails to operate correctly(DQ)

f. Hydrant is missing any parts (+10 second penalty)

g. Coach enters or assist the competitors in the competition area (+10 second penalty)

h. Tools placed in pockets before or after start of event (+5 second penalty)

i. Tools left on the hydrant when competitors are finished (+5 second penalty)

j. Tools not used on any bolt, nut, caps and lower valve assembly (+5 second penalty per)

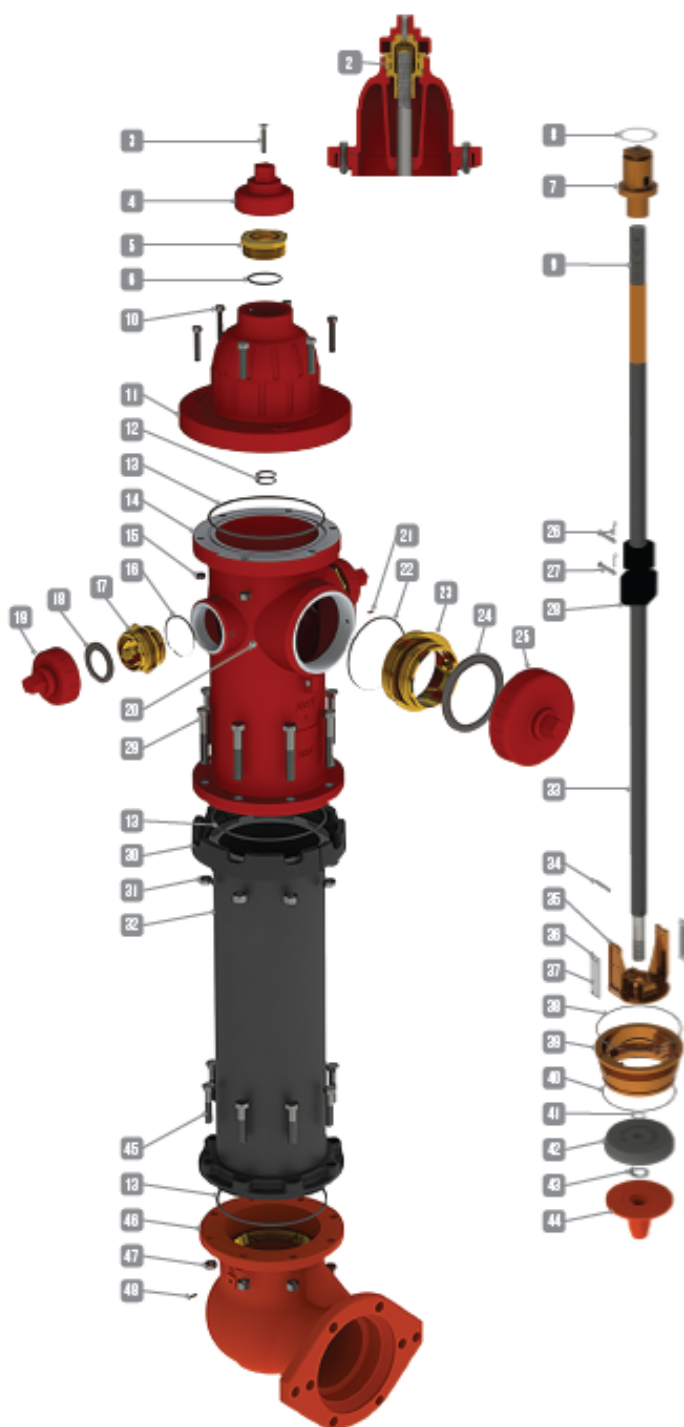
55. Teams must use the tools provided to tighten down all parts of the fire hydrant when assembling is taking place. **A tool must be used every time when tightening hydrant parts. Hand tightening will result in a penalty.**

The hydrant for the 2019 Hydrant Hysteria is the M&H Style 129 Fire Hydrant



129 HYDRANT PARTS ASSEMBLY

ITEM NO.	DESCRIPTION	MATERIAL	QTY.
2	Hold Down Nut Set Screw	Stainless Steel	1
3	Lubricating Bolt	Zinc Plated Steel	1
4	Weathershield	Cast Iron	1
5	Hold Down Nut	Brass Alloy C87850	1
6	Hold Down Nut O-Ring #331	EPDM	1
7	Operating Nut	Brass Alloy C87850	1
8	Thrust Washer	Acetal	1
9	Upper Rod	Steel C1117 HFS w/ Brass Stem Sleeve	1
10	Bonsert Hex Bolts	Zinc Plated Steel	6
11	Bonsert	Cast Iron	1
12	Rod O-Rings #218	Buss-N	2
13	Bonsert/Nozzle/Standpipe O-Ring #370	Buss-N	3
14	Nozzle Section	Cast Iron	1
15	Bonsert Hex Nuts	Zinc Plated Steel	6
16	Hose Nozzle O-Ring #234	Buss-N	2
17	Hose Nozzle	Brass Alloy C87850	2
18	Hose Cap Gasket	Rebber	2
19	Hose Cap	Cast Iron	2
20	Hose Nozzle Set Screw	Stainless Steel	2
21	Pumper Nozzle Set Screw	Stainless Steel	1
22	Pumper Nozzle O-Ring #250	Buss-N	1
23	Pumper Nozzle	Brass Alloy C87850	1
24	Pumper Cap Gasket	Rebber	1
25	Pumper Cap	Cast Iron	1
26	Retaining Clips	Stainless Steel	2
27	Clevis Pins	Stainless Steel	2
28	Break Coupling	Cast Iron	1
29	Safety Flange Bolts	Zinc Plated Steel	8
30	Safety Flange	Cast Iron	2
31	Safety Flange Nuts	Zinc Plated Steel	8
32	Stand Pipe S/A	Ductile Iron	1
33	Lower Rod	Steel C1117 HF5	1
34	Lower Rod Pin	Stainless Steel	1
35	Upper Valve Plate	Aluminum Bronze Alloy	1
36	Drain Valve Flwts	Stainless Steel	8
37	Drain Valve Facing	EPDM	2
38	Seet Ring Upper O-Ring #261	Buss-N	1
39	Seet Ring	Aluminum Bronze Alloy	1
40	Seet Ring Lower O-Ring #293	Buss-N	1
41	Lower Rod O-Ring #202	Buss-N	1
42	Main Valve Seet	Buss-N	1
43	Bottom Plate Lock Washer	Stainless Steel	1
44	Bottom Plate	Cast Iron	1
45	Shoe Hex Bolts	Stainless Steel	8
46	Shoe/Retainer Ring S/A	Ductile Iron/Brass Alloy C87850	1
47	Shoe Hex Nuts	Stainless Steel	8
48	Drain Hole Bushing	Bronze	2
49	S-Hook (not shown)	Zinc Plated Steel	1
50	Chain (not shown)	Zinc Plated Steel	3



THE BEST OF VIRGINIA
TAP WATER TASTE TEST EVENTS RULES

1. INTRODUCTION

The Taste Test event determines which Virginia AWWA Utility offers the best tasting water in the State. The winner of this event will represent the Virginia Section at the Best of The Best Tap Water Taste Test held at the National AWWA Annual Conference and Exposition.

2. ELIGIBILITY

Utilities must be located within the Commonwealth of Virginia.

Utilities wishing to compete in the Taste Test must be affiliated with the AWWA Virginia section, either through utility or individual AWWA membership.

Utilities wishing to compete in the Taste Test must have at least one person registered for the Distribution Seminar and Utility Rodeo event.

Utilities planning to submit a sample for the Taste Test shall not have any state or federal drinking water violations (MCL, monitoring, record-keeping, etc.) for the current and prior calendar year. Samples found to be in violation will be disqualified.

Only one entry per utility may be submitted.

3. COMPETITION

The samples will be covered and stored at room temperature until the time of the event. The name of the Utility will be recorded and replaced with a number. At the time of the event, all samples will be uncovered and distributed into sampling cups and will be tasted at room temperature.

A panel of 3 judges and 1 alternate, appointed by the Distribution Seminar and Utility Rodeo host utility and approved by the Distribution Systems Committee Chair, shall taste each of the water samples from the participating utilities.

The samples will be judged on four different categories – Clarity, Odor, Flavor, and After-taste. Each category will be on a scale of 1 to 10, with 10 being the best in each category. The scores from each category will then be added together for a total score ranging between 10 and 40.

If there is a discrepancy in any of the judge's scoring sheet, the scores for that particular judge will be thrown out and the alternate used. If there are discrepancies with all of the judges scores, than all scores will be thrown out and the contest will be re-started.

The scores from all of the judges will be totaled and the top three water samples will be recorded. The utility supplying the water with the highest score will represent the Virginia Section at the ACE Conference. Only the winner shall be announced during the Banquet the night before the Rodeo.

If the Section winner is unable to attend the National Competition, they will be given the option of either providing samples to another Virginia Section member to act as a representative for them at the competition or defer to the runner-up to enter the competition.

If the Section winner receives any state or federal drinking water violations (MCL, monitoring, record-keeping, etc.) between the date of the Section Taste Test and two (2) calendar weeks prior to the start of the ACE conference, then the runner-up utility will have the option of attending the event on behalf of the Section.

4. REQUIREMENTS

Each utility participating in the Taste Test shall submit three (3) individual 1-liter samples in standard glass containers with a secured cap. Each sample container shall be clearly labeled with the name of the utility.

The samples shall be received at the registration table located at the Distribution Seminar and Utility Rodeo hotel, **no later than 6:00 pm** on Monday, the first day of the conference, by the individual representing the utility. Submitting the sample in person is the recommended.

Samples may be mailed to the event, at the sole risk of the municipality, and shall be received and transferred to the Committee by the deadline. See registration information for the mailing address of the conference hotel. Address the package to "VA AWWA Utility Rodeo representative". All risks associated with shipping, receiving and transfer of packages shall be that of the municipality. Late packages will be returned to the municipality unopened, and the municipality shall forfeit competing in the event.

END OF TASTE TEST RULES

PEOPLES CHOICE TASTE TEST AWARD

1. INTRODUCTION

In addition to the Best of Virginia Taste Test, there will also be a People's Choice taste test. Winner of this event will receive a trophy and recognition by the section.

2. ELIGIBILITY

All entries in the Best of Virginia Taste Test are also entered into this competition.

3. COMPETITION

The samples will be covered and stored at room temperature until the time of the event. The name of the Utility will be recorded and replaced with a number. At the time of the event, all samples will be uncovered, poured into individual glass pitchers, then distributed into sampling cups and will be tasted at room temperature.

Each registrant will be given one ticket to vote for the taste test. During the morning breaks of the seminar schedule, a tasting table will be set up in the exhibition hall. Registrants will then be invited to taste each sample and cast their vote by depositing their ticket for the sample of their choice.

The tickets received by each sample will then be counted and the Utility with the most will be announced as winner at the Banquet the night before the Rodeo.

4. REQUIREMENTS

See Taste Test rules