Test Administration Instructions

Mechanical Contractors Association MCAA of America

SAFETY EXCELLENCE INITIATIVE

How to Administer Tests to Trainees

In this document, you will find a 20-question multiple-choice test that corresponds with a particular MCAA Safety Training Video.

1. Ensure that you have the test that corresponds with the planned video training.
2. Make one copy of the test for each trainee.
3. Give one test to each trainee. Remind them to put their name on each page of their copy in case pages become separated.
4. Collect all test papers after they are completed.
5. Grade the tests using the answer keys provided in the "Answer Keys" document at www.mcaa.org/private/videos.
6. Return the graded test papers to each trainee. Make sure they understand the correct answers to all of the test questions they answered incorrectly.
7. Collect **ALL** of the test papers and place them in a secure file.
8. Keep the completed test papers with your documentation for this video to show proof of worker training.

Breaking the Line: Best Practices for Safe Line Breaking Test

Mechanical Contractors Association MCAA of America

SAFETY EXCELLENCE INITIATIVE

Name: _____

***Directions* – Circle the letter corresponding to the best answer for each question.**

1. Line breaking is _____
   a. the unintentional opening of a closed piping system.
   b. the intentional opening of a system.
   c. the intentional opening of a closed piping system.
   d. the unintentional opening of a piping system.

2. Line breaking can involve work with _____
   a. fittings and valves.
   b. gauges, pumps and vessels.
   c. thermowells and sight glasses.
   d. all of the above.

3. When breaking into certain types of lines without the use of safe work practices, burns can occur from _____
   a. hot water or steam.
   b. chemicals.
   c. fires.
   d. all of the above.

4. Other common line breaking hazards include being struck by flying objects, _____
   a. inhaling toxic substances, and incurring skin and eye conditions.
   b. musculoskeletal problems and dermatological conditions.
   c. radiation and heat related issues.
   d. none of the above.

5. Some of the critical safe work practices that must take place before opening a line include _____
   a. identifying the hazards associated with the substance in the line.
   b. conducting a thorough walk down.
   c. locking out energy sources and isolating the section of the piping system you'll be working on.
   d. all of the above.

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6. To determine what type or types of hazards are associated with the substance in a line, read the material safety data sheet (MSDS) and focus on _____
    a. flammability, health and reactivity hazards.
    b. flammability, health, reactivity and special hazards.
    c. flammability, health and dermatological hazards.
    d. flammability, health, reactivity and dermatological hazards.

7. The best ways to determine what personal protective equipment (PPE) you will need are to _____
    a. read the MSDS for the substance and check with the facility owner.
    b. check with the facility owner and the workers in the facility.
    c. read the labels on the piping system and check with the facility owner.
    d. read the MSDS and check with your project manager.

8. A thorough walk down includes confirming the type of service, identifying tie-in points and _____
    a. determining how to isolate the section you'll be working on.
    b. determining what systems, tools, work areas or processes will be affected.
    c. a and b.
    d. clearing the area of all unnecessary personnel.

9. Safety problems can occur when lines are not completely drained, the wrong valves are closed, or _____
    a. the facility owner is not present during line breaking.
    b. motor control centers are not locked out.
    c. the line contains a gas.
    d. a stainless steel piping system is made from hexavalent chromium.

10. Other safety problems can occur if _____
    a. one or more valves are missed during the lockout/tagout procedures.
    b. local starts and stops are missed during lockout/tagout procedures.
    c. residual pressure is still in the line when it's opened.
    d. all of the above.

11. No matter what type of substance is in the line or what type of service the line provides, always wear _____ in addition to your safety glasses or splash-proof safety goggles.
    a. an impermeable coverall
    b. a face shield
    c. ear plugs
    d. impermeable protective gloves

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12. To lockout a valve, use _____
    a. a valve cover lockout device or a sturdy chain and a padlock.
    b. a padlock and a hazard warning tag.
    c. a hazard warning tag.
    d. a combination lock.

13. When preparing to break into a line, only _____ should be in the immediate work area.
    a. facility workers and the pipe fitters or plumbers performing the break
    b. the facility owner and pipe fitters or plumbers performing the break
    c. authorized workers
    d. properly trained and authorized workers who are involved in the process

14. To keep people out of the immediate work area when the line break is occurring, _____
    a. let all affected personnel know about the line break the day before it occurs.
    b. inform all affected project managers and supervisors about when and where the break will occur.
    c. set up barricades or use danger tape and set up signs indicating that a line break is occurring.
    d. none of the above.

15. Be sure to have _____ nearby in case someone is sprayed with a harmful substance.
    a. an emergency shower and eye wash station
    b. a fully stocked first aid kit
    c. an automated external defibrillator (AED)
    d. emergency telephone numbers

16. When preparing to separate flanges to break into a line that carries a flammable substance, be sure to _____
    a. have a fire extinguisher in close proximity to the work.
    b. wear Hazard Category 2 arc-flash protective equipment.
    c. attach a bonding wire to each flange.
    d. wear a Class E hardhat with your face shield.

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Name: _____

17. When the piping system is opened and you're collecting the residual flammable substance, be sure that the collection bucket is _____
    a. clean.
    b. grounded.
    c. bonded.
    d. plastic.

18. If you have to separate flanges with a wedge in a system that carries a flammable substance, use a _____ wedge.
    a. non-sparking
    b. steel
    c. steep angle
    d. sharp

19. When selecting a blind flange to cap a break in the system, be sure to choose a flange that is strong enough to _____
    a. hold the gasket securely in place.
    b. withstand at least five times the pressure that will be placed upon it.
    c. withstand the pressure and temperature in the line.
    d. none of the above.

20. Right before breaking into a line, make sure that the _____ working properly.
    a. emergency shower and eye wash stations are
    b. flange bolts are
    c. collection bucket is
    d. flange gasket is