



State Firefighters' and Fire Marshals' Association of Texas

Texas Volunteer Firefighters' and Fire Marshals' Certification Board

PO Box 1409 ♦ Manchaca, Texas 78652-1409 ♦ 512.453.1876 (fax)

www.sffma.org ♦ 512.454.3473 (phone)

NFPA 472 – Hazardous Materials: Technician (2013 Edition)

Performance Standards Evaluation Form

Containing Pressure Vessel Leaks: Railcar

Competencies: 7.4.3(1d-h)(2)

Objective(s)

Working in a two-person team and given a leaking-pressure vessel, the candidates will contain the leak by using the appropriate equipment.

Candidate Instructions

Evaluator must read the following, verbatim, to the candidates:

"In this skill station, working as a member of a two-person team, you must contain the leak from a liquid or vapor valve or from the pressure relief device on a railcar. Candidate A will select and inventory the appropriate kit based on the container, prepare the hood by removing the outlet cap, open the valve, and apply the gasket. Candidate B will verbalize the appropriate Personal Protective Equipment (PPE), tie back the protective housing lid, close the valves, and replace and tighten any loose plugs. Both candidates will apply the components of the kit to the leaking fitting. You will begin on my instruction to start. The skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Do you have any questions?"

Evaluator Instructions

The evaluator will draw, at random, one of three pressure vessels (100- or 150-pound [46- or 68-kilogram] cylinder, 1-ton [1-metric ton] container, or railcar).

An evaluator must randomly assign a role for each candidate. After the roles are assigned, the evaluator should read the scenario out loud and ensure candidates understand their roles. Make sure each candidate visibly displays their name (e.g., name on helmet) to ensure they are operating in their assigned role.

If you do not have enough candidates and must use an already-evaluated candidate or approved personnel to run the skill as designed, document each candidate's name in the position they were assigned, mark "N/A" for the individual who is not being evaluated, and write "candidate not evaluated" in the Notes section.

Read the Candidate Instructions verbatim to the candidate and give them an opportunity to ask questions prior to beginning the skill test. The candidate will not be allowed to view the skill sheet once testing begins. After the question opportunity, prepare your stopwatch and instruct the candidate to begin the skill. While the candidate is performing the skill test, observe whether they perform each of the line items and mark the skill sheet appropriately. All safety violations must be explicitly noted. (A safety violation would be a grossly negligent action, such as a candidate walking into a water stream.)

Grading Instructions

When filling out forms, be sure to use candidates' first and last names. In order for a candidate to receive credit for a line item, you must correctly circle the appropriate grade/points for each line item on the skill sheet. Earned scores for all line items are either full credit or zero credit; no partial credit is allowed. Note the candidate's status under Initial Test Notes and give it to the lead instructor.

Failure/Remediation Instructions

Even though this is a team exercise, candidates are evaluated individually. If a candidate fails their assigned task, you will announce that the team failed and will have to retest. You should talk to each team member privately, so as not to point out which candidate(s) failed. As in individual skills testing the lead instructor will need to remediate the candidate and have them sign the Retest Information Statement on the skill sheet prior to retesting. Allow the candidate time to practice before retesting. Failed skills must be fully documented in the Notes sections of the skill sheet.

For the retest, all candidates remain in their original roles/stations; however, only the candidate(s) who failed the first time is evaluated during the retest. If a candidate fails the retest, they have failed the team skill.



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Preparation and Equipment

Evaluation materials:

- 1 chlorine housing (liquid chlorine tank car fittings can be ground at level or on a tank car)
- 1 chlorine kit A
- 1 chlorine kit B
- 1 chlorine kit C



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Evaluation Location:		Date:
Evaluator 1 Name:	Retest Evaluator 1 Name:	
Evaluator 1 Signature:	Retest Evaluator 1 Signature:	
Evaluator 2 Name:	Retest Evaluator 2 Name:	
Evaluator 2 Signature:	Retest Evaluator 2 Signature:	
Evaluators may not evaluate a skill if a conflict of interest exists. A conflict may be defined as an interest that affects, or appears likely to affect the judgment or conduct of an individual associated with the skills testing process. An evaluator may not participate in the skills testing process for an immediate family member, classmate, or if the evaluator was the class instructor for the skill.		

Skill Performance Criteria: Containing Pressure Vessel Leaks: Railcar

Candidate A:				
Verbalizes selection of appropriate kit for task (kit C)	Pass	Fail	Pass	Fail
Verbalizes inventory of kit components	Pass	Fail	Pass	Fail
Prepares hood by removing outlet cap from vent valve on hood, opens valve, and applies gasket	Pass	Fail	Pass	Fail
Places yoke hooks into port openings of protective housing	Pass	Fail	Pass	Fail
Centers screw over hood and tightens screw forcing hood and gasket against the railcar	Pass	Fail	Pass	Fail
Checks for leaks and adjusts as needed to ensure leak is sealed off	Pass	Fail	Pass	Fail
Overall Performance Rating: (Pass = must correctly perform all Pass/Fail items)	Pass	Fail	Pass	Fail

Candidate A Initial Test Notes:	RETEST INFORMATION It is very important that you, as an examinee, understand the number of attempts allowed on the performance skills examination. You are allowed only one retest for each failed skill station.
	I, _____, have read and understand the above information on retesting. <input type="checkbox"/> I have received sufficient retraining and remediation. _____ Signature
Candidate A Retest Notes:	_____ Date



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Candidate B:				
Verbalizes selection of appropriate PPE	Pass	Fail	Pass	Fail
Ties back protective housing lid and verbalizes if none are present	Pass	Fail	Pass	Fail
Closes valves that are open, replaces missing plugs, and tightens loose plugs	Pass	Fail	Pass	Fail
Unscrews the valve outlet plug and places the plug inside the housing (liquid and vapor) OR				
Caps pressure relief valve and verbalizes monitoring pressure inside railcar	Pass	Fail	Pass	Fail
Cleans pressure plate around valve	Pass	Fail	Pass	Fail
Places yoke hooks into port openings of protective housing	Pass	Fail	Pass	Fail
Centers screw over hood and tightens screw forcing hood and gasket against the railcar	Pass	Fail	Pass	Fail
Closes valve and replaces outlet cap on hood	Pass	Fail	Pass	Fail
Overall Performance Rating: (Pass = must correctly perform all Pass/Fail items)	Pass	Fail	Pass	Fail

Candidate B Initial Test Notes:	<p>RETEST INFORMATION It is very important that you, as an examinee, understand the number of attempts allowed on the performance skills examination. You are allowed only one retest for each failed skill station.</p> <p>I, _____, have read and understand the above information on retesting.</p> <p><input type="checkbox"/> I have received sufficient retraining and remediation.</p> <p>_____ Signature _____ Date</p>
Candidate B Retest Notes:	