

**CDC 47203W**

**Hazardous Materials -  
Technician**

**Performance Test**



**Air Force Institute for Advanced Distributed Learning  
Air University  
Air Education and Training Command**

# Acknowledgement

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## Performance Test Instructions

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This performance test supplement is based on the 2008 Edition of NFPA 472; *Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents*. This performance test provides detailed performance checklist items for candidate testing. Performance tests should not be conducted until the candidate has successfully completed the academic portion of the CDC. However, it is strongly encouraged that this supplement and the checklist it contains be used during the normal course of study. Candidates may practice the performance tests at anytime during study and up until testing is conducted. Practice is highly encouraged.

This particular course uses thirteen workstations. Within each workstation there are several tasks and objectives (NFPA line items). A “Performance Summary Sheet” precedes each workstation or group of evaluated tasks. This sheet lists the NFPA line items evaluated and the specific tasks that must be accomplished. Each performance test lists the setting and tools/equipment required for the listed tasks.

Remember, official performance test notifications must be made ten days prior to the actual performance test or the candidate’s performance test results will not be accepted by the DoD Administrative Center. For specific program guidance see DoD Manual 6055.6. Your performance test notifications must be made using the following web site. <http://www.dodffcert.com/performance/notify.cfm>

It is important also to understand the grading process used during the evaluation. For a full overview of the CDC process and performance testing please view the *Department of Defense Fire Fighter Certification Program Video* P/N #612288. Additional information on grading criteria is provided on the next page.

## Grading Criteria

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The following criteria will be used to evaluate and determine the pass/fail status of a candidate. Each item in the Performance Test Checklist is given a rating.

**Critical (C)** – This rating has been assigned to items which, if omitted or performed incorrectly, would result in severe injury to, or death of an individual. Should a fire fighter fail to perform any one item rated as Critical (**C**), the fire fighter would be unsuccessful in attaining the required proficiency level for that performance test.

**Major (M)** – This rating has been given to any item which is very important to the general safety of personnel and the successful completion of the evolution. Should a fire fighter fail to perform any three items rated as Major (**M**), the fire fighter would be unsuccessful in attaining the required proficiency level for that performance test.

**General** – This rating although there is not symbol, has been given to all remaining items that in combination are relevant to the successful completion of the evolution. Should a fire fighter fail to perform any **four** items rated as General, the fire fighter would be unsuccessful in attaining the required proficiency level for that performance test.

Should a fire fighter fail to perform any combination of Major or General rated items resulting in a sum total of **four**, the fire fighter would be unsuccessful in attaining the required proficiency level for that performance test.

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# Technician Competencies

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## SKILLS TEST #1 – Identification of Hazardous Materials Containers

### Performance Test Summary Sheet

**Objectives:** NFPA Standard 472, Chapter 7, Paragraphs 7.2.1.1, 7.2.1.1.1, 7.2.1.1.2, 7.2.1.1.3, 7.2.1.1.4, 7.2.1.1.5 and 7.2.1.1.6

**Task:** Given examples of various hazardous materials/WMD facility and transportation containers, identify each container by type and identify at least one material and its hazard class within 30 minutes.

# Technician Competencies

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## Performance Test Item – Container Identification

### Personnel

**Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraphs 7.2.1.1, 7.2.1.1.1, 7.2.1.1.2, 7.2.1.1.3, 7.2.1.1.4, 7.2.1.1.5 and 7.2.1.1.6

**Task:** Given examples of various hazardous materials/WMD facility and transportation containers, identify each container by type and identify at least one material and its hazard class within 30 minutes.

**Setting:** Fire Department training classroom or equivalent.

**Tools/Equipment:** Pencil/pen and paper.

### Attainment

**Standard:** Correctly perform the tasks outlined above within 30 minutes.

### Evaluator's

**Guidance:** The candidate must identify each container by type, the hazard class, and also provide an example of the material contained in each container. The graphics required to support this performance objective are available at [www.dodffcert.com/documents/ProgramNews.htm](http://www.dodffcert.com/documents/ProgramNews.htm).

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
1. Given examples of the following railroad tank cars, identify each car by type and identify the container by name and specification and identify the typical contents by name and hazard class:	1. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , the candidate identified a:		
(a) Cryogenic liquid tank cars	a. Cryogenic liquid tank car	___	___
(b) Nonpressure tank cars	1. Material example	___	___
(c) Pneumatically unloaded hopper cars	2. Hazard class	___	___
(d) Pressure tank cars	b. Nonpressure tank car	___	___
	1. Material example	___	___
	2. Hazard class	___	___
	c. Pneumatically unloaded hopper car	___	___
	Material example	___	___
	Hazard class	___	___
	d. Pressure tank car	___	___
	1. Material example	___	___
	2. Hazard class	___	___

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. Given examples of the following intermodal tanks, identify the container by name and specification and identify the typical contents by name and hazard class:	2. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , the candidate identified a(n):		
	a. IM-101	___	___
(a) Nonpressure intermodal tanks	1. Material example	___	___
1. IM 101 (IMO Type 1 internationally) portable tank	2. Hazard class	___	___
2. IM 102 (IMO Type 2 internationally) portable tank	b. IM-102	___	___
	1. Material example	___	___
	2. Hazard class	___	___
(b) Pressure intermodal tanks (IMO Type 5 internationally)	c. Pressure intermodal tank (IMO Type 5)	___	___
(c) Specialized intermodal tanks	1. Material example	___	___
1. Cryogenic intermodal tanks (IMO Type 7 internationally)	2. Hazard class	___	___
2. Tube modules	d. Cryogenic Intermodal tank (IMO Type 7)	___	___
	1. Material example	___	___
	2. Hazard class	___	___
	e. Tube module	___	___
	1. Material example	___	___
	2. Hazard class	___	___

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
3. Given examples of the following cargo tanks, identify the container by name and specification and identify the typical contents by name and hazard class:	3. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , the candidate identified a:		
(a) Dry bulk cargo tanks	a. Dry bulk cargo tank	___	___
(b) Nonpressure liquid tanks	1. Material example	___	___
(c) Low pressure tanks	2. Hazard class	___	___
(d) Corrosive liquid tanks	b. Nonpressure liquid tank	___	___
(e) High pressure tanks	1. Material example	___	___
(f) Cryogenic liquid tanks	2. Hazard class	___	___
(g) Tube trailers	c. Low pressure chemical tank	___	___
	1. Material example	___	___
	2. Hazard class	___	___
	d. Corrosive liquid tank	___	___
	1. Material example	___	___
	2. Hazard class	___	___
	e. High pressure tank	___	___
	1. Material example	___	___
	2. Hazard class	___	___
	f. Cryogenic liquid tank	___	___
	1. Material example	___	___
	2. Hazard class	___	___

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
3. <i>(Continued)</i>	g. Compressed Gas Tube trailer	___	___
	1. Material example	___	___
	2. Hazard class	___	___
4. Given examples of the following facility storage tanks, identify the container by name and identify the typical contents by name and hazard class:	4. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , the candidate identified a:		
(a) Nonpressure tank	a. Nonpressure facility tank	___	___
(b) Pressure tank	1. Material example	___	___
(c) Cryogenic tank	2. Hazard class	___	___
	b. Pressure facility tank	___	___
	1. Material example	___	___
	2. Hazard class	___	___
	c. Cryogenic liquid tank	___	___
	1. Material example	___	___
	2. Hazard class	___	___

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
5. Given examples of the following non-bulk containers, identify the package by name and identify the typical contents by name and hazard class:	5. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , the candidate identified:		
(a) Bags (b) Carboys (c) Cylinders (d) Drums	a. Bags	<input type="checkbox"/>	<input type="checkbox"/>
	1. Material example	<input type="checkbox"/>	<input type="checkbox"/>
	2. Hazard class	<input type="checkbox"/>	<input type="checkbox"/>
	b. Carboys	<input type="checkbox"/>	<input type="checkbox"/>
	1. Material example	<input type="checkbox"/>	<input type="checkbox"/>
	2. Hazard class	<input type="checkbox"/>	<input type="checkbox"/>
	c. Cylinders	<input type="checkbox"/>	<input type="checkbox"/>
	1. Material example	<input type="checkbox"/>	<input type="checkbox"/>
	2. Hazard class	<input type="checkbox"/>	<input type="checkbox"/>
	d. Drums	<input type="checkbox"/>	<input type="checkbox"/>
	1. Material example	<input type="checkbox"/>	<input type="checkbox"/>
	2. Hazard class	<input type="checkbox"/>	<input type="checkbox"/>



# Technician Competencies

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## SKILLS TEST #2: Container Construction and Capacities

### Performance Test Summary Sheet

**Objectives:** NFPA Standard 472, Chapter 7, Paragraphs 7.2.1.2, 7.2.1.2.1, 7.2.1.2.2, 7.2.3.1, 7.2.3.1.1, 7.2.3.1.2 and 7.2.3.1.3

**Task:** Given examples of various hazardous materials/WMD facility and transportation containers and the appropriate reference guide, identify the capacity and basic design and construction features, including closures, for each container within 30 minutes.

# Technician Competencies

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## Performance Test Item – Container Construction and Capacities

### Personnel

**Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraphs 7.2.1.2, 7.2.1.2.1, 7.2.1.2.2, 7.2.3.1, 7.2.3.1.1, 7.2.3.1.2 and 7.2.3.1.3

**Task:** Given examples of various hazardous materials/WMD facility and transportation containers and the appropriate reference guide, identify the capacity and basic design and construction features, including closures, for each container within 30 minutes.

**Setting:** Fire Department Training Classroom or equivalent.

### Tools

**Equipment:** Pencil/pen and paper.

**Attainment Standard:**

Correctly perform the tasks outlined above within 30 minutes.

### Evaluator

**Note:** The candidate must identify the capacity by weight or volume of each container and also identify various design and construction features. The graphics required to support this performance objective are available at [www.dodffcert.com/documents/ProgramNews.htm](http://www.dodffcert.com/documents/ProgramNews.htm).

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
<p>1. Given examples of three facility and three transportation containers, identify the approximate capacity of each container.</p>	<p>1. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u>, the candidate identified the approximate capacity of a:</p>		
<p>Using the markings on the container, identify the capacity (by weight and/or volume) of the following examples of transportation vehicles:</p>	<p>a. Cargo tank</p>	<p>___</p>	<p>___</p>
	<p>b. Tank car</p>	<p>___</p>	<p>___</p>
	<p>c. Tank container</p>	<p>___</p>	<p>___</p>
	<p>d. Nonpressure facility tank</p>	<p>___</p>	<p>___</p>
	<p>e. Pressure facility tank</p>	<p>___</p>	<p>___</p>
	<p>f. Cryogenic liquid tank</p>	<p>___</p>	<p>___</p>
<p>Using the markings on the container and other available resources, identify the capacity (by weight and/or volume) of each of the following facility containers:</p>			
	<p>(a) Nonpressure tank</p>		
	<p>(b) Pressure tank</p>		
	<p>(c) Cryogenic liquid tank</p>		



# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. <i>(Continued)</i>	c. Low pressure chemical tank	___	___
(a) Cargo tanks	1. Most common construction materials	___	___
	2. Maximum working pressures	___	___
	3. Maximum capacity	___	___
	4. Loading points	___	___
	5. Offloading points	___	___
	d. Corrosive liquid tank	___	___
	1. Most common construction materials	___	___
	2. Maximum working pressures	___	___
	3. Maximum capacity	___	___
	4. Loading points	___	___
	5. Offloading points	___	___

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. <i>(Continued)</i>	e. High pressure tank	___	___
(a) Cargo tanks	1. Most common construction materials	___	___
	2. Maximum working pressures	___	___
	3. Maximum capacity	___	___
	4. Loading points	___	___
	5. Offloading points	___	___
	f. Cryogenic liquid tank	___	___
	1. Most common construction materials	___	___
	2. Maximum working pressures	___	___
	3. Maximum capacity	___	___
	4. Loading points	___	___
	5. Offloading points	___	___
	g. Compressed gas tube trailer	___	___
	1. Most common construction materials	___	___
	2. Maximum working pressures	___	___
	3. Maximum capacity	___	___
	4. Loading points	___	___
	5. Offloading points	___	___

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. (Continued)	h. Nonpressure facility tank	___	___
(b) Fixed facility tanks:	1. Type of tank	___	___
1. Nonpressure tanks	2. Pressure ranges	___	___
2. Pressure tanks	i. Pressure facility tanks	___	___
	1. Type of tank	___	___
	2. Pressure ranges	___	___
	j. Cryogenic liquid tanks	___	___
	1. Type of tank	___	___
	2. Pressure ranges	___	___
(c) Intermodal tanks:	k. IM-101 portable tank	___	___
Nonpressure intermodal tanks:	1. Type of frame	___	___
a. IM-101 portable tank	2. Most common construction materials	___	___
b. IM-102 portable tank	3. Maximum working pressures	___	___
Pressure intermodal tanks (IMO Type 5)	4. Maximum capacities	___	___
Specialized intermodal tanks:	1. IM-102 portable tank	___	___
a. Cryogenic intermodal tanks	1. Type of frame	___	___
b. Tube modules	2. Most common construction materials	___	___
	3. Maximum working pressures	___	___
	4. Maximum capacities	___	___

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. <i>(Continued)</i>			
(c) Intermodal tanks	m. Pressure intermodal tank (Specification 51)	—	—
	1. Type of frame	—	—
	2. Most common construction materials	—	—
	3. Maximum working pressures	—	—
	n. Cryogenic intermodal tank	—	—
	1. Type of frame	—	—
	2. Most common construction materials	—	—
	3. Maximum working pressures	—	—
	(d) One ton containers (pressure drums)	o. Tube module	—
1. Type of frame		—	—
2. Most common construction materials		—	—
3. Maximum working pressures		—	—
p. Ton container		—	—
1. Fusible plugs		—	—
	2. Liquid valves	—	—
	3. Vapor valves	—	—

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. (Continued)			
(e) Pipelines	q. Pipeline	—	—
	1. Valves	—	—
	2. Markers	—	—
(f) Railroad cars:	r. Cryogenic liquid tank car	—	—
(a) Cryogenic liquid tank cars			
(b) Nonpressure tank cars	1. Most common construction material	—	—
(c) Pneumatically unloaded hopper cars			
(d) Pressure tank cars	2. Maximum working pressures	—	—
	3. Maximum capacity	—	—
	4. Loading points	—	—
	5. Offloading points	—	—

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. <i>(Continued)</i>	s. Nonpressure tank car	___	___
(f) Railroad cars	1. Most common construction material	___	___
	2. Maximum working pressures	___	___
	3. Maximum capacity	___	___
	4. Loading points	___	___
	5. Offloading points	___	___
	t. Pneumatically unloaded hopper car	___	___
	1. Most common construction material	___	___
	2. Maximum working pressures	___	___
	3. Maximum capacity	___	___
	4. Loading points	___	___
	5. Offloading points	___	___
	u. Pressure tank car	___	___
	1. Most common construction material	___	___
	2. Maximum working pressures	___	___
	3. Maximum capacity	___	___
	4. Loading points	___	___
	5. Offloading points	___	___

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. <i>(Continued)</i>	v. Intermediate bulk container (tote tank)	—	—
(g) Intermediate bulk containers (Also known as tote tanks)	1. Most common construction material	—	—
	2. Maximum working pressures	—	—
	3. Maximum capacity	—	—
	4. Loading points	—	—
	5. Offloading points	—	—



# Technician Competencies

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## SKILLS TEST #3: Determining Unknown Materials

### Performance Test Summary Sheet

**Objectives:** NFPA Standard 472, Chapter 7, Paragraphs 7.2.1.3, 7.2.1.3.5 and 7.2.1.5

**Task:** Given monitoring equipment and three unknown materials demonstrate field maintenance and testing of the monitoring equipment, select the appropriate monitors, and classify three unknown materials within 60 minutes.

# Technician Competencies

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## Performance Test Item -- Determining Unknown Materials

### Personnel

**Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraphs 7.2.1.3, 7.2.1.3.5 and 7.2.1.5

**Task:** Given monitoring equipment and three unknown materials demonstrate field maintenance and testing of the monitoring equipment, select the appropriate monitors, and classify three unknown materials within 60 minutes.

**Setting:** Fire Department outside training area or equivalent.

### Tools

**Equipment:** The candidate will be provided with the monitoring equipment provided at the installation where the candidate is employed.

**Attainment Standard:**

Correctly perform the tasks outlined above within 60 minutes.

### Evaluator

**Note:** The technician level responder is expected to be able to identify unknown materials in the event that a container's shipping papers, placards, MSDS or other identifying items have been destroyed or are unavailable. The candidate will be asked to correctly maintain and field calibrate the equipment prior to analyzing the three given materials. Three materials shall be provided to analyze.

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
1. Demonstrate the field maintenance and testing procedures for the monitoring equipment, test strips, and reagents provided by the authority having jurisdiction.	1. In accordance with the Manufacturers Operating Instructions for the equipment provided by the authority having jurisdiction, the candidate demonstrated		
	a. Field maintenance	(M)	___ ___
	b. Field testing	(M)	___ ___
2. Given three hazardous materials/WMD, one of which is a solid, one a liquid, and one a gas, and the following monitoring equipment, test strips, and reagents, select the appropriate equipment and demonstrate the proper techniques to identify or classify by hazard and quantify the materials:	2. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , the candidate demonstrated the ability to identify and quantify		
	a. Material #1 (Solid)	(M)	___ ___
	1. Selected appropriate equipment	(M)	___ ___
(a) Carbon monoxide meter	2. Used the proper technique	(M)	___ ___
(b) Colorimetric tubes	3. Classified or identified by hazard	(M)	___ ___
(c) Combustible gas indicator	4. Quantified material	(M)	___ ___
(d) Oxygen meter			
(e) Passive Dosimeters	b. Material #2 (Liquid)	(M)	___ ___
(f) pH indicators and/or pH meters	1. Selected appropriate equipment	(M)	___ ___
(g) Photoionization and flame ionization detectors	2. Used the proper technique	(M)	___ ___
(h) Radiation detection instruments			
(i) Reagents			
(j) Test strips			
(k) WMD detectors (chemical and biological)			
(l) Other equipment provided by AHJ			

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. <i>(Continued)</i>			
	3. Classified or identified by hazard	(M)	___ ___
	4. Quantified (pH)	(M)	___ ___
	c. Material #3 (Gas)	(M)	___ ___
	1. Selected appropriate equipment	(M)	___ ___
	2. Used the proper technique	(M)	___ ___
	3. Classified or identified by hazard	(M)	___ ___
	4. Quantified the concentration in the air	(M)	___ ___

# Technician Competencies

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## SKILLS TEST #4: Signs and Symptoms of Exposure

### Performance Test Summary Sheet

**Objectives:** NFPA Standard 472, Chapter 7, Paragraph 7.2.2.4

**Task:** Given various hazardous materials scenarios and necessary materials, collect hazard, response, and exposure information not available from the Emergency Response Guidebook or MSDS within 60 minutes.

# Technician Competencies

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## Performance Test Item – Signs and Symptoms of Exposure

### Personnel

**Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraph 7.2.2.4

**Task:** Given five HazMat/WMD scenarios and the associated reference materials, identify the signs and symptoms of exposure to each material and the target organ effects of the exposure to that material.

**Setting:** Fire Department outside training area or equivalent.

### Tools

**Equipment:** The candidate will be provided with a copy of the NIOSH/OSHA Pocket Guide to Chemical Hazards and other response guidebooks utilized at the installation at which the candidate is employed.

### Attainment

**Standard:** Correctly perform the tasks outlined above within 60 minutes.

### Evaluator

**Note:** The candidate will be provided five separate scenarios and must demonstrate the ability to locate response information.

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO	
1. Given five hazardous materials/WMD scenarios and the associated reference materials, identify the signs and symptoms of exposure to each material and the target organ effects of the exposure to that material.	1. In accordance with the <u>NIOSH/OSHA Pocket Guide</u> the candidate identified:			
	a. Scenario #1			
	1. Signs and symptoms of exposure	(M)	___	___
	2. Target organ effects	(M)	___	___
	b. Scenario #2			
	1. Signs and symptoms of exposure	(M)	___	___
	2. Target organ effects	(M)	___	___
	c. Scenario #3			
	1. Signs and symptoms of exposure	(M)	___	___
	2. Target organ effects	(M)	___	___
	d. Scenario #4			
	1. Signs and symptoms of exposure	(M)	___	___
	2. Target organ effects	(M)	___	___
	e. Scenario #5			
	1. Signs and symptoms of exposure	(M)	___	___
2. Target organ effects	(M)	___	___	

## **SKILLS TEST #5: Determining Public Protective Response Options**

### **Performance Test Summary Sheet**

**Objectives:** NFPA Standard 472, Chapter 7, Paragraph 7.2.5.4

**Task:** Given examples of a HazMat/WMD release and the corresponding instrument monitoring readings, plot the monitoring readings and determine the applicable public protective response options and the areas to be protected.

# Technician Competencies

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## Performance Test Item -- Determining Public Protective Response Options

### Personnel

**Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraph 7.2.5.4

**Task:** Given three examples of a HazMat/WMD release and the corresponding instrument monitoring readings, plot the monitoring readings and determine the applicable public protective response options and the areas to be protected.

**Setting:** Fire Department outside training area or equivalent.

### Tools

**Equipment:** Provide three examples of flammable and toxic HazMat/WMD release scenarios that incorporate the use of a site map. The candidate shall then be provided with the appropriate monitoring readings and the corresponding hazard information from a technical reference source, such as the *NIOSH / OSHA Pocket Guide to Chemical Hazards*.

### Attainment

**Standard:** Correctly perform the tasks outlined above within 30 minutes.

### Evaluator

**Note:** At least one scenario shall be a toxic release. In determining hazard control zones and public protective options, the candidate shall utilize published exposure values and guidelines for toxic releases and EPA guidelines for flammable releases.

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO	
1. Given three examples of hazardous materials / WMD release and the corresponding instrument monitoring readings, plot the monitoring readings and determine the applicable public protective response options and the areas to be protected.	1. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> or the <u>NIOSH/OSHA Pocket Guide</u> the candidate determined:			
	a. Plotted EPA hazard control zones	(C)	___	___
	1. <10% LEL	(C)	___	___
	2. 10% to 25% LEL	(C)	___	___
	3. >25% LEL	(C)	___	___
	4. Determined protective action option and area affected		___	___
	b. Plotted EPA hazard control zones		___	___
	1. <10% LEL		___	___
	2. 10% to 25% LEL		___	___
	3. >25% LEL		___	___
	4. Determined protective action option and area affected		___	___
	c. Plotted hazard control zones for toxic release		___	___
	1. >STEL or IDLH		___	___
	2. > TLV/TWA		___	___
	3. < TLV/TWA		___	___

# Technician Competencies

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ELEMENTS/STEPS	STANDARDS	YES	NO
1. Continued	d. Determined protective action option and area affected action and area affected	—	—

## SKILLS TEST # 6: Determining Protective Clothing

### Performance Test Summary Sheet

**Objectives:** NFPA Standard 472, Chapter 7, Paragraphs 7.3.3 and 7.3.3.4.6

**Task:** Given examples of hazardous materials and chemical compatibility charts, determine and select the appropriate personal protective equipment to be utilized within 30 minutes.

# Technician Competencies

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## Performance Test Item – Determining Protective Clothing

### Personnel

**Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraphs 7.3.3 and 7.3.3.4.6

**Task:** Given three examples of various hazardous materials, determine the appropriate protective clothing construction materials for a given response option using chemical compatibility charts.

**Setting:** Fire Department outside training area or equivalent.

### Tools

**Equipment:** The candidate shall be provided with the names of three hazardous materials.

### Attainment

**Standard:** Correctly perform the tasks outlined above within 30 minutes.

### Evaluator

**Guidance:** The candidate shall use compatibility charts for chemical protective clothing utilized at the installation at which the candidate is employed to determine the compatibility of suit materials.

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
1. Given three examples of various hazardous materials, determine the appropriate protective clothing construction materials for a given response option using chemical compatibility charts	1. In accordance with the provided chemical compatibility charts, the candidate determined: <ul style="list-style-type: none"> <li>a. Material #1               <ul style="list-style-type: none"> <li>1. Compatibility (C)    ___    ___</li> <li>2. Breakthrough time (C)    ___    ___</li> </ul> </li> <li>b. Material #2               <ul style="list-style-type: none"> <li>1. Compatibility (C)    ___    ___</li> <li>2. Breakthrough time (C)    ___    ___</li> </ul> </li> <li>c. Material #3               <ul style="list-style-type: none"> <li>1. Compatibility (C)    ___    ___</li> <li>2. Breakthrough time (C)    ___    ___</li> </ul> </li> </ul>		

# Technician Competencies

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## SKILLS TEST #7: Plan of Action

### Performance Test Summary Sheet

**Objectives:** NFPA Standard 472, Chapter 7, Paragraphs 7.3.5 and 7.3.5.2

**Task:** Given a scenario involving HazMat/WMD incidents, the local emergency response plan and standard operating procedures, develop a plan of action, including a site safety and control plan, within 60 minutes.

# Technician Competencies

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## Performance Test Item – Plan of Action

**Personnel Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraphs 7.3.5 and 7.3.5.2

**Tasks:** 1. Given the local emergency response plan or the organization's standard operating procedure, identify procedures to accomplish the following tasks:

- (a) Make ongoing assessments of the situation
- (b) Command on-scene personnel (incident management system) assigned to the hazardous materials branch
- (c) Coordinate hazardous materials support and mutual aid
- (d) Provide resources for public protection action (evacuation or shelter in-place)
- (e) Coordinate with fire suppression services as it relates to hazardous materials incidents
- (f) Coordinate hazardous materials branch control, containment, or confinement operations
- (g) Coordinate with the medical branch to insure proper medical assistance (ambulance) and medical treatment (hospital)
- (h) Coordinate on-scene decontamination when appropriate

2. Given a scenario involving a hazardous materials/WMD incident, develop a site safety and control plan that must be included as part of the Incident Action Plan and list and describe the safety considerations included as well as identify the procedures, equipment, and safety precautions for preserving and collecting legal evidence at hazardous materials/WMD incidents

**Setting:** Fire Department training room or equivalent.

**Tools**

**Equipment:** The candidate will be provided with a copy of the current local emergency response plan and standard operating instructions for the installation at which the candidate is employed. Pen/pencil and writing paper or electronic media.

**Attainment**

**Standard:** Correctly perform the tasks outlined above within 60 minutes.

**Evaluator**

**Guidance:** The candidate shall be given the details of a hazardous materials incident and shall demonstrate the ability to utilize information found in these documents.

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
1. Given the local emergency response plan or the organizations standard operating procedure, identify procedures to accomplish the following tasks:	1. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , the candidate identified the following procedures from the local emergency response plans and standard operating procedures:		
(a) Make ongoing assessments of the situation	a. Made ongoing assessments of the situation	(M)	___ ___
(b) Command on-scene personnel (incident management system) assigned to the hazardous materials branch	b. Command on-scene personnel (incident management system) assigned to the hazardous materials branch	(M)	___ ___
(c) Coordinate hazardous materials support and mutual aid	c. Coordinated hazardous materials support and mutual aid	(M)	___ ___
(d) Provide resources for public protection action (evacuation or shelter in-place)	d. Provided resources for public protection action (evacuation or shelter in-place)	(M)	___ ___
(e) Coordinate with fire suppression services as it relates to hazardous materials incidents	e. Coordinated with fire suppression services as it relates to hazardous materials incidents	(M)	___ ___
(f) Coordinate hazardous materials branch control, containment, or confinement operations	f. Coordinated hazardous materials branch control, containment, or confinement operations	(M)	___ ___
(g) Coordinate with the medical branch to insure proper medical assistance (ambulance) and medical treatment (hospital)			
(h) Coordinate on-scene decontamination when appropriate			

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
1. <i>(Continued)</i>	g. Coordinated with the medical branch to insure proper medical assistance (ambulance) and medical treatment (hospital)	(M)	___ ___
	h. Coordinated on-scene decontamination when appropriate	(M)	___ ___

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. Given a scenario involving a hazardous materials/WMD incident, develop a site safety and control plan that must be included as part of the Incident Action Plan and list and describe the safety considerations included.	2. In accordance with the <u>Hazardous Materials Response Handbook (5<sup>th</sup> Edition)</u> , local emergency response plans, and standard operating procedures, the candidate developed and described the following considerations:		
	a. Analyzed the hazard and risk	(M)	___ ___
	b. Site map or sketch	(M)	___ ___
	c. Site work (control) zones	(M)	___ ___
	d. Use of buddy system	(M)	___ ___
	e. Site communications	(M)	___ ___
	f. Incident command post	(M)	___ ___
	g. SOPs and safe work practices	(M)	___ ___
	h. Medical assistance and triage	(M)	___ ___
	i. Hazard monitoring plan	(M)	___ ___
	j. Decontamination procedures	(M)	___ ___
	k. Other relevant topics	(M)	___ ___

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
3. Identify the procedures, equipment, and safety precautions for preserving and collecting legal evidence at hazardous materials/WMD incidents	3. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , local emergency response plans, and standard operating procedures the candidate:		
	a. Identified procedures	(M)	___ ___
	b. Identified equipment	(M)	___ ___
	c. Identified safety precautions	(M)	___ ___

# Technician Competencies

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## SKILLS TEST # 8: Technical and Mass Decontamination

### Performance Test Summary Sheet

**Objectives:** NFPA Standard 472, Chapter 7, Paragraph 7.4.5

**Task:** Given a scenario involving a hazardous materials/WMD incident, demonstrate the ability to set-up and implement the each of the following types of decontamination operation:

- Technical decontamination operations in support of entry operations.
- Technical decontamination operations involving ambulatory and non-ambulatory victims.
- Mass decontamination operations involving ambulatory and non-ambulatory victims.

# Technician Competencies

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## Performance Test Item – Technical and Mass Decon

**Personnel Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraph 7.4.5

- Tasks:**
1. Demonstrate the setup and implementation of technical decontamination operations in support of entry operations.
  2. Demonstrate the setup and implementation of technical decontamination operations involving ambulatory and non-ambulatory victims.
  3. Demonstrate the setup and implementation of mass decontamination operations involving ambulatory and non-ambulatory victims.
  4. Demonstrate the setup and implementation of mass decontamination operations involving ambulatory and non-ambulatory victims.

**Setting:** Fire Department outside training area or equivalent.

**Tools**

**Equipment:** Given all necessary tools and equipment provided by the AHJ to successfully perform the task.

**Attainment  
Standard:**

Correctly perform each tasks outlined above within 60 minutes for each.

**Evaluator  
Guidance:**

The candidate shall be provided with details of a HazMat/WMD incident. The name of the material and elements of an Incident Action Plan that pertains to the type of decontamination operation will be provided. The technical decontamination reduction corridor shall be set up in accordance with the local emergency response plan and standard operating procedures for the installation at which the candidate is employed. As a minimum the candidate shall show the ability to provide for a nine-step technical decontamination procedure for entry operations and ambulatory victims.

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
1. Demonstrate setup and implementation of technical decontamination in support of entry operations as specified in the planned response	1. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , local emergency response plans, and standard operating procedures the candidate demonstrated:		
	a. Tool drop station	(C)	___ ___
	b. Primary wash station	(C)	___ ___
	c. Suit or SCBA removal station	(C)	___ ___
	d. Removal of personal clothing station	(C)	___ ___
	e. Decontamination of body station	(C)	___ ___
	f. Dry and dress in clean garment station	(C)	___ ___
	g. Medical evaluation station	(C)	___ ___
	h. Rest and Rehab station	(C)	___ ___

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
2. Demonstrate setup and implementation of technical decontamination operations involving ambulatory and non-ambulatory victims as specified in the planned response	2. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , local emergency response plans, and standard operating procedures the candidate:		
	a. Separated ambulatory (walking) from non-ambulatory (non-walking) victims	(C)	___
	b. Selected appropriate decon method based upon contaminant	(C)	___
	c. Protected airway and injuries appropriately	(C)	___
	d. Ensured coordination with medical personnel	(C)	___
3. Demonstrate setup and implementation of mass decontamination operations involving ambulatory and non-ambulatory victims as specified in the planned response	e. Collected and tagged possessions, as appropriate	(C)	___
	3. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , local emergency response plans, and standard operating procedures the candidate:		
	a. Separated ambulatory (walking) from non-ambulatory (non-walking) victims	(C)	___
	b. Positioning of fire apparatus and hose streams	(C)	___
	c. Set-up and implementation in a timely manner	(C)	___

# Technician Competencies

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## **SKILLS TEST #9: Inspection and Use of Chemical Protective Clothing**

### **Performance Test Summary Sheet**

**Objectives:** NFPA Standard 472, Chapter 7, Paragraphs 7.4.2(3) & (4)

**Task:** Given specialized personal protective equipment and appropriate respiratory protection, inspect, record, don, work in, and doff the clothing within 60 minutes.

# Technician Competencies

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## Performance Test Item – Protective Clothing Inspection and Use

**Personnel Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraphs 7.4.2(3) & (4)

- Tasks:**
1. Describe the maintenance, testing, inspection, and storage procedures for personal protective equipment provided by the authority having jurisdiction according to the manufacturer's specifications and recommendations.
  2. Demonstrate the ability to record the use, repair, and testing of chemical-protective clothing according to the manufacturer's specifications and recommendations.
  3. Demonstrate the ability to don, work in, and doff self-contained breathing apparatus in addition to any other respiratory protection provided by the authority having jurisdiction.
  4. Demonstrate donning, working in, and doffing liquid-splash protective, vapor-protective and chemical protective clothing in addition to any other specialized protective equipment provided by the authority having jurisdiction.

**Setting:** Fire Department outside training area or equivalent.

**Tools**

**Equipment:** The candidate shall be given a specialized protective garment that the candidate shall be expected to wear during a hazardous materials incident.

**Attainment Standard:** Correctly perform the tasks outlined above within 60 minutes.

**Evaluator**

**Note:** Use of the manufacturer's guidance is required for the inspection, recording, and storage of the suits.

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
1. Describe the maintenance, testing, inspection, and storage procedures for personal protective equipment provided by the authority having jurisdiction according to the manufacturer's specifications and recommendations	1. In accordance with the manufacturers operating instructions, local emergency response plans, and standard operating procedures the candidate described: <ul style="list-style-type: none"> <li>a. Maintenance procedures (C)</li> <li>b. Testing procedures (C)</li> <li>c. Inspection procedures (C)</li> <li>d. Storage procedures (C)</li> </ul>	___	___
2. Demonstrate the ability to record the use, repair, and testing of chemical-protective clothing according to the manufacturer's specifications and recommendations	2. In accordance with the manufacturers operating instructions, local emergency response plans and standard operating procedures the candidate demonstrated: <ul style="list-style-type: none"> <li>a. Use (C)</li> <li>b. Repair (C)</li> <li>c. Testing (C)</li> </ul>	___	___
3. Demonstrate donning, working in, and doffing self-contained breathing apparatus and other respiratory protection provided by the authority having jurisdiction	3. In accordance with the manufacturers operating instructions, local emergency response plans and standard operating procedures the candidate demonstrated: <ul style="list-style-type: none"> <li>a. Donning (C)</li> <li>b. Working in (C)</li> <li>c. Doffing (C)</li> </ul>	___	___

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
4. Demonstrate donning, working in, and doffing chemical protective clothing in addition to any other specialized protective equipment provided by the authority having jurisdiction	4. In accordance with the manufacturers operating instructions, local emergency response plans and standard operating procedures the candidate demonstrated:		
	a. Donning	(C)	___ ___
	b. Working in	(C)	___ ___
	c. Doffing	(C)	___ ___

# Technician Competencies

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## SKILLS TEST # 10: Containing Leaks on Bulk/Non-Bulk Pressure Vessels

### Performance Test Summary Sheet

**Objectives:** NFPA Standard 472, Chapter 7, Paragraphs 7.4.3.1(1) & (2)

**Task:** Given necessary materials, select, maintain, and inspect the appropriate tools, and demonstrate the ability to contain various leaks on a pressure vessel within 60 minutes.

# Technician Competencies

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## Performance Test Item – Containing Leaks on Pressure Vessels

**Personnel Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraphs 7.4.3(1) & (2)

- Tasks:**
1. Given a pressure vessel, select the appropriate material or equipment and demonstrate methods to contain leaks on the following locations:
    - (a) Fusible plug
    - (b) Fusible plug threads
    - (c) Side wall of cylinder
    - (d) Valve blowout
    - (e) Valve gland
    - (f) Valve inlet threads
    - (g) Valve seat
    - (h) Valve stem assembly blowout
  2. Given the fittings on a pressure container, demonstrate the ability to perform the following:
    - (a) Close valves that are open
    - (b) Replace missing plugs
    - (c) Tighten loose plugs
  3. Identify the maintenance and inspection procedures for the tools and equipment provided for the control of hazardous materials releases according to the manufacturer's specifications and recommendations.

**Setting:** Fire Department outside training area or equivalent.

**Tools**

**Equipment:** Given all necessary tools and equipment to successfully complete the task.

**Attainment Standard:** Correctly perform the tasks outlined above within 60 minutes.

**Evaluator**

**Note:** It is recommended that the candidate be provided a Chlorine A or Chlorine B kit to accomplish this objective however, equipment used by the authority having jurisdiction may be utilized.

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
1. Given a pressure vessel, select the appropriate material or equipment and demonstrate methods to contain leaks on the following locations:	1. In accordance with the manufacturers operating instructions, the candidate controlled a leak at a: <ul style="list-style-type: none"> <li>a. Fusible plug (M)</li> <li>b. Fusible plug threads (M)</li> <li>c. Side wall of cylinder (M)</li> <li>d. Valve blowout (M)</li> <li>e. Valve gland (M)</li> <li>f. Valve inlet threads (M)</li> <li>g. Valve seat (M)</li> <li>h. Valve stem assembly blowout (M)</li> </ul>	___ ___ ___ ___ ___ ___ ___ ___	___ ___ ___ ___ ___ ___ ___ ___
2. Given the fittings on a pressure container, demonstrate the ability to perform the following: <ul style="list-style-type: none"> <li>(a) Close valves that are open</li> <li>(b) Replace missing plugs</li> <li>(c) Tighten loose plugs</li> </ul>	2. In accordance with the manufacturers operating instructions, the candidate: <ul style="list-style-type: none"> <li>a. Closed open valves (M)</li> <li>b. Replaced missing plugs (M)</li> <li>c. Tightened loose plugs (M)</li> </ul>	___ ___ ___	___ ___ ___

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
3. Identify the maintenance and inspection procedures for the tools and equipment provided for the control of hazardous materials releases according to the manufacturer's specifications and recommendations	3. In accordance with the manufacturers operating instructions for the equipment utilized in Parts 1 and 2, the candidate properly identified:		
	a. Maintenance procedures	(M)	___ ___
	b. Inspection procedures	(M)	___ ___

# Technician Competencies

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## SKILLS TEST # 11: Containing Leaks on 55 Gallon Drums

### Performance Test Summary Sheet

**Objectives:** NFPA Standard 472, Chapter 7, Paragraphs 7.4.3(3) & (4)

**Task:** Given a 55-gallon drum and an 85 gallon overpack drum, necessary tools and equipment, contain various leaks on the drum, and demonstrate three methods of overpacking within 30 minutes.

# Technician Competencies

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## Performance Test Item – Containing Leaks on Non-pressure Vessels

**Personnel Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraphs 7.4.3(3) & (4)

- Tasks:**
1. Given a 55-gal (208-L) drum, demonstrate the ability to contain the following types of leaks using appropriate tools and materials:
    - (a) Bung leak
    - (b) Chime leak
    - (c) Forklift puncture
    - (d) Nail puncture
  
  2. Given a 55-gal (208-L) drum and an overpack drum, demonstrate the ability to place the 55-gal drum into the overpack drum using the following methods:
    - (a) Rolling slide-in
    - (b) Slide-in
    - (c) Slip-over

**Setting:** Fire Department outside training area or equivalent.

**Tools**

**Equipment:** Given all necessary tools and equipment provided by the AHJ to successfully perform the task. (55 gallon drum, 85 gallon over pack, leak repair kit, bung wrench, drum up-ender, etc.)

**Attainment  
Standard:**

Correctly perform the tasks outlined above within 30 minutes.

**Evaluator  
Guidance:**

The candidate shall demonstrate the ability to contain various leaks on 55-gallon drums, then overpack the drum after the repairs have been made.

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
1. Given a 55-gal (208-L) drum, demonstrate the ability to contain the following types of leaks using appropriate tools and materials:	1. In accordance with the manufacturers operating instructions, the candidate controlled a:		
(a) Bung leak	a. Bung leak	(C)	___ ___
(b) Chime leak	b. Chime leak	(C)	___ ___
(c) Forklift puncture	c. Forklift puncture	(C)	___ ___
(d) Nail puncture	d. Nail puncture	(C)	___ ___
2. Given a 55-gal (208-L) drum and an overpack drum, demonstrate the ability to place the 55-gal drum into the overpack drum using the following methods:	2. In accordance with the manufacturers operation instructions, the candidate overpacked a 55-gal drum using the following techniques:		
(a) Rolling slide-in	a. Rolling slide-in method	(C)	___ ___
(b) Slide-in	b. Slide-in method	(C)	___ ___
(c) Slip-over	c. Slip-over method	(C)	___ ___

## **SKILLS TEST # 12: Containing Leaks on Cargo Tanks**

### **Performance Test Summary Sheet**

**Objectives:** NFPA Standard 472, Chapter 7, Paragraph 7.4.3(8)

**Task:** Given a nonpressure liquid tank and dome cover clamp, correctly install the clamp on the dome within 15 minutes.

# Technician Competencies

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## Performance Test Item – Cargo Tank Leaks

**Personnel Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraph 7.4.3(8)

**Task:** Given a nonpressure liquid tank and a dome cover clamp, demonstrate the ability to install the clamp on the dome properly.

**Setting:** Fire Department outside training area or equivalent.

**Tools**

**Equipment:** Given all necessary tools and equipment provided by the AHJ to successfully perform the task. (Dome clamp, dome clamp trainer or cargo tank with dome cover)

**Attainment**

**Standard:** Correctly perform the tasks outlined above within 15 minutes.

**Evaluator**

**Guidance:** The candidate shall demonstrate the ability to correctly install the dome cover clamp on a dome cover.

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
1. Given a nonpressure liquid tank and a dome cover clamp, demonstrate the ability to install the clamp on the dome properly.	1. In accordance with the manufacturers operating instructions the candidate properly:		
	a. Installed the dome clamp	(C)    ___	___
	b. Verbally communicated safety considerations	(C)    ___	___

# Technician Competencies

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## SKILLS TEST # 13: Mitigating Hazardous Materials Incidents

### Performance Test Summary Sheet

**Objectives:** NFPA Standard 472, Chapter 7, Paragraphs 7.6.1, 7.6.2 and 7.6.3

**Task:** Given a scenario involving a HazMat/WMD incident, demonstrate the ability to direct resources, terminate the incident, provide a debriefing, conduct a critique, and document the incident within 240 minutes.

# Technician Competencies

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## Performance Test Item – Final Scenario

**Personnel Classification:** Hazardous Materials Technician

**Objective:** NFPA Standard 472, Chapter 7, Paragraphs 7.6.1, 7.6.2 and 7.6.3

- Tasks:**
1. Describe three components of an effective debriefing; Describe the key topics in an effective debriefing; Describe when a debriefing should take place; Describe who should be involved in a debriefing.
  2. Describe three components of an effective critique; Describe who should be involved in a critique; Describe why an effective critique is necessary after a hazardous materials incident; Describe what written documents should be prepared as a result of the critique.
  3. Identify the (steps to be taken in compiling reporting requirements of federal, state, and local agencies and (organizational requirements); Identify and (describe) the importance of documentation for a hazardous materials incident, including training records, exposure records, incident reports, (debriefing records), and critique reports.
  4. Identify the steps in keeping an activity log and exposure records for hazardous materials incidents. Identify the requirements found in the local emergency response plan and the organization's standard operating procedures for compiling hazardous materials incident reports (to include hot zone entry and exit logs and personal protective equipment logs).
  5. Identify the requirements for filing documents and maintaining records as defined in the local emergency response plan and the organization's standard operating procedures. Demonstrate the proper completion of the reports required by the local emergency response plan and standard operating procedures.

**Setting:** Fire Department outside training area or equivalent.

**Tools**

**Equipment:** Given all necessary tools and equipment provided by the AHJ to safely and effectively perform the duties outlined above.

**Attainment  
Standard:**

Correctly perform the tasks outlined above within 240 minutes.

# Technician Competencies

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**Evaluator**

**Guidance:**

The candidate shall be provided with the details of a HazMat/WMD incident. The candidate shall demonstrate the ability to direct hazardous materials branch resources during this simulated incident. It is not the intent to place the candidate in the role of incident commander, but in the role of a technician at a hazardous materials incident. The candidate must take an active role during the direction, evaluation, termination, debriefing, critique, and documentation portions of this simulated incident.

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
<p>1. Describe three components of an effective debriefing.</p> <p>Describe the key topics in an effective debriefing.</p> <p>Describe when a debriefing should take place.</p> <p>Describe who should be involved in a debriefing.</p>	<p>1. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u>, the candidate described within the scope of the local emergency response plan, standard operating procedures, or written incident management system:</p> <p>a. Components (M)</p> <p>b. Key topics (M)</p> <p>c. When should a debriefing take place (M)</p> <p>d. Who should be involved (M)</p>	<p>___</p> <p>___</p> <p>___</p> <p>___</p>	<p>___</p> <p>___</p> <p>___</p> <p>___</p>
<p>2. Describe three components of an effective critique.</p> <p>Describe who should be involved in a critique.</p> <p>Describe why an effective critique is necessary after a hazardous materials incident.</p> <p>Describe what written documents should be prepared as a result of the critique.</p>	<p>2. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u>, the candidate described within the scope of the local emergency response plan, standard operating procedures, or written incident management system:</p> <p>a. Components (M)</p> <p>b. Who should be involved (M)</p> <p>c. Why is it necessary (M)</p> <p>d. What documents should be prepared (M)</p>	<p>___</p> <p>___</p> <p>___</p> <p>___</p>	<p>___</p> <p>___</p> <p>___</p> <p>___</p>

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
<p>3. Identify the steps to be taken in compiling reporting requirements of federal, state, and local agencies and (organizational requirements).</p> <p>Identify and (describe) the importance of documentation for a hazardous materials incident, including training records, exposure records, incident reports, (debriefing records), and critique reports.</p>	<p>3. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u>, the candidate identified and described within the scope of the local emergency response plan, standard operating procedures, or written incident management system:</p> <p>a. Reporting requirements</p> <p>1. Federal agencies (M) ___ ___</p> <p>2. State agencies (M) ___ ___</p> <p>3. Local agencies (M) ___ ___</p> <p>4. Organization (M) ___ ___</p> <p>b. Importance of documentation</p> <p>1. Training records (M) ___ ___</p> <p>2. Exposure records (M) ___ ___</p> <p>3. Incident reports (M) ___ ___</p> <p>4. Debriefing records (M) ___ ___</p> <p>5. Critique reports (M) ___ ___</p>		

## Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
4. Identify the steps in keeping an activity log and exposure records for hazardous materials incidents.	4. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , the candidate identified within the scope of the local emergency response plan, standard operating procedures, or written incident:		
	a. Activity log	(M)	___ ___
	b. Exposure records	(M)	___ ___
5. Identify the requirements found in the local emergency response plan and the organization's standard operating procedures for compiling hazardous materials incident reports (to include hot zone entry and exit logs and personal protective equipment logs).	5. In accordance with <u>Hazardous Materials Response Handbook (5th Edition)</u> , candidate identified within the scope of the local emergency response plan, standard operating procedures, or written incident management system:		
	a. Compiling incident reports		
	1. Hot zone entry and exit logs	(M)	___ ___
	2. Personal protective	(M)	___ ___
	3. Equipment logs	(M)	___ ___

# Technician Competencies

ELEMENTS/STEPS	STANDARDS	YES	NO
6. Identify the requirements for filing documents and maintaining records as defined in the local emergency response plan and the organizations standard operating procedures.	6. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , the candidate identified within the scope of the local emergency response plan, standard operating procedures, or written incident management system:		
	a. Filing documents	(M)	___ ___
	b. Maintaining records	(M)	___ ___
7. Demonstrate the proper completion of reports required by the local emergency response plan and the organization's standard operating procedures.	7. In accordance with the <u>Hazardous Materials Response Handbook (5th Edition)</u> , the candidate identified within the scope of the local emergency response plan, standard operating procedures, or written incident management system:		
	a. Completion of required reports	(M)	___ ___

# Performance Test Record

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## Hazardous Materials - Technician

**INSTRUCTIONS:** This form must be completed and kept on file. A copy of this form is also required to be submitted with the candidate's certification package.

Performance Test Ref # \_\_\_\_\_ Date of Evaluation \_\_\_\_\_

Candidate's Name \_\_\_\_\_ SSN \_\_\_\_\_

Evaluator's Name \_\_\_\_\_ SSN \_\_\_\_\_

The candidate has PASSED/FAILED the Hazardous Materials - Technician Performance Tests for the stations marked below:

STATION	PASSED	FAILED
Identification of Hazardous Materials Containers	_____	_____
Container Construction and Capacities	_____	_____
Determining Unknown Materials	_____	_____
Signs and Symptoms of Exposure	_____	_____
Determining Public Protective Response Options	_____	_____
Determining Protective Clothing	_____	_____
Plan of Action	_____	_____
Technical and Mass Decontamination	_____	_____
Inspection and Use of Chemical Protective Clothing	_____	_____
Containing Leaks on Bulk/Non-bulk Pressure Vessels	_____	_____
Containing Leaks on 55 Gallon Drums	_____	_____
Containing Leaks on Cargo Tanks	_____	_____
Mitigating a Hazardous Materials Incident	_____	_____

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# Performance Test Record

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## Hazardous Materials - Technician Continued

If candidate has failed the performance evaluation, provide the following information:  
(Use additional sheets, if necessary)

Objective(s):

Reason(s) for failure:

Candidate's Signature \_\_\_\_\_

Evaluator's Signature \_\_\_\_\_

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***"FOUO. This document contains information exempt from mandatory disclosure under the FOIA. Exemption 5 U.S.C. 552(b)(6) applies. This information is also protected by the Privacy Act of 1974 and must be safeguarded from unauthorized disclosure."***