

# **Hazardous Materials Technician**

**16 Skills Total**

**NFPA 1072,**

**Standard for Hazardous Materials/Weapons of Mass**

**Destruction Emergency Response Personnel Professional**

**Qualifications,**

**2017 Edition**

## Hazardous Materials Responder Skill Sheets

NFPA 1072 Ch7 Tech	Task:	JPR Initial Certification Requirement: 6 Mandatory 3 Random Renewal JPR Requirement: 100% of All JPRs (Including all subsections)
1	Develop a Hazmat Incident Action Plan	7.1.7, 7.3.1, 7.3.1(B), 7.3.4, 7.5.1, 7.5.1(B), 7.6.1, 7.6.1(B)
2	Use Approved Reference Resources	7.2.2, 7.2.2(B), 7.2.5, 7.2.5(B)
3	Sampling Techniques	7.2.1, 7.2.1(B), 7.2.2, 7.2.2(B)
4	Don, Work In & Decon - Splash Protection Clothing	7.3.2, 7.3.2(B), 7.4.2, 7.4.2(B), 7.4.3.1, 7.4.3.2, 7.4.3.2(B), 7.4.3.3(B)
5	Don, Work In & Decon - Vapor Protection Clothing	7.3.2, 7.3.2(B), 7.4.2, 7.4.2(B), 7.4.3.1, 7.4.3.2, 7.4.3.2(B), 7.4.3.3(B)
6	Inspect, Test, Maintain and Document Chemical Protective Clothing	7.3.2, 7.4.2(A), (B)
7	Perform Mass Decon on Ambulatory and Nonambulatory Victims	7.3.3, 7.3.3(B), 7.4.4.1
8	Perform Technical Decon on Ambulatory and Nonambulatory Victims	7.3.3, 7.3.3(B), 7.4.4.2
9	Plug and Patch a Leaking Container	7.2.3, 7.2.3(B), 7.4.3.2, 7.4.3.2(B)
10	Control a Leak from a Pressurized Container	7.4.3.2, 7.4.3.2(B)
11	Ground & Bond and Liquid Product Transfer from a Nonpressure Container	7.4.3.4, 7.4.3.4(B)
12	Remote Valve Shutoff/Emergency Shutoff Device	7.4.3.1(B), 7.4.3.2(B)
13	Tighten or Close Leaking Valves, Packing Glands, and/or Fittings	7.4.3.2, 7.4.3.2(B)
14	Dome Clamp	7.4.3.2, 7.4.3.2(B)
15	Overpack a Nonbulk Container and/or Radioactive Materials Package	7.4.3.3, 7.4.3.3(B)
16	Perform, Evaluate, and Terminate a Hazardous Material Incident	7.2.4, 7.2.4(B), 7.4.1, 7.4.1(B), 7.5.1, 7.5.1(B), 7.6.1, 7.6.1(B)

**SKILL SHEET # 1**  
**Develop a Hazmat Incident Action Plan**

<b>JPR: 7.1.7, 7.3.1, 7.3.1(B), 7.3.4, 7.5.1, 7.5.1(B), 7.6.1, 7.6.1(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Develop a hazmat incident action plan with a site safety control plan that includes response options and objectives. Complete required reports and documentation according to AHJ policies and procedures.
<b>Performance Outcome</b>	The candidate, given a scenario, will develop a hazmat incident action plan with a site safety and control plan, along with response options and objectives.  Preparing an action plan utilizing a scenario based on a skill sheet (9-15), identifying site safety and control components, identifying points for a safety briefing, identifying pre-entry tasks, identifying atmospheric and physical safety hazards when incident involves a confined space, and preserving and collecting legal evidence.
<b>Equipment Required:</b> A Hazardous Materials scenario, resource list, ICS Form 208, response objectives and scenario options.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
1. Identify or develop response objectives for the incident.				
2. Develop response options for each objective based on risk analysis.				
3. Develop and describe a site map or sketch with control zones.				
4. Describe site communications.				
5. Develop and describe medical assistance and triage.				
6. Develop and describe decontamination procedures.				
7. Identify points for a safety briefing.				
8. Describe preserving and collecting legal evidence.				
9. Complete and record reports and supporting documentation.				
<b>Total</b>			<b>Score needed to pass</b>	
			<b>8</b>	

\_\_\_\_\_

Candidate Name Candidate Signature Date

---

Proctor Name Proctor Signature

---

Retest Proctor Name Retest Proctor Signature

<b>SITE SAFETY AND CONTROL PLAN</b> ICS 208 HM	1. Incident Name:	2. Date Prepared:	3. Operational Period: Time:									
<b>Section I. Site Information</b>												
4. Incident Location:												
<b>Section II. Organization</b>												
5. Incident Commander:	6. HM Group Supervisor:	7. Tech. Specialist - HM Reference:										
8. Safety Officer:	9. Entry Leader:	10. Site Access Control Leader:										
11. Asst. Safety Officer - HM:	12. Decontamination Leader:	13. Safe Refuge Area Mgr:										
14. Environmental Health:	15.	16.										
17. Entry Team: (Buddy System)		18. Decontamination Element:										
Name:	PPE Level	Name:	PPE Level									
Entry 1		Decon 1										
Entry 2		Decon 2										
Entry 3		Decon 3										
Entry 4		Decon 4										
<b>Section III. Hazard/Risk Analysis</b>												
19. Material:	Container type	Qty.	Phys. State	pH	IDLH	F.P.	I.T.	V.P.	V.D.	S.G.	LEL	UEL
Comment:												
<b>Section IV. Hazard Monitoring</b>												
20. LEL Instrument(s):						21. O <sub>2</sub> Instrument(s):						
22. Toxicity/PPM Instrument(s):						23. Radiological Instrument(s):						
Comment:												
<b>Section V. Decontamination Procedures</b>												
24. Standard Decontamination Procedures:										YES:	NO:	
Comment:												
<b>Section VI. Site Communications</b>												
25. Command Frequency:				26. Tactical Frequency:				27. Entry Frequency:				
<b>Section VII. Medical Assistance</b>												
28. Medical Monitoring:		YES:	NO:	29. Medical Treatment and Transport In-place:					YES:	NO:		
Comment:												

**Section VIII. Site Map**

30. Site Map:



Weather  Command Post  Zones  Assembly Areas  Escape Routes  Other

**Section IX. Entry Objectives**

31. Entry Objectives:

**Section X. SOPS and Safe Work Practices**

32. Modifications to Documented SOP s or Work Practices: YES: NO:

Comment:

**Section XI. Emergency Procedures**

33. Emergency Procedures:

**Section XII. Safety Briefing**

34. Asst. Safety Officer - HM Signature: Safety Briefing Completed (Time):

35. HM Group Supervisor Signature:

36. Incident Commander Signature:

## INSTRUCTIONS FOR COMPLETING THE SITE SAFETY AND CONTROL PLAN ICS 208 HM

A Site Safety and Control Plan must be completed by the Hazardous Materials Group Supervisor and reviewed by all within the Hazardous Materials Group prior to operations commencing within the Exclusion Zone.

Item Number	Item Title	Instructions
1.	Incident Name/Number	Print name and/or incident number.
2.	Date and Time	Enter date and time prepared.
3.	Operational Period	Enter the time interval for which the form applies.
4.	Incident Location	Enter the address and or map coordinates of the incident.
5 - 16.	Organization	Enter names of all individuals assigned to ICS positions. (Entries 5 & 8 mandatory). Use Boxes 15 and 16 for other functions: i.e. Medical Monitoring.
17 - 18.	Entry Team/Decon Element	Enter names and level of PPE of Entry & Decon personnel. (Entries 1 - 4 mandatory buddy system and back-up.)
19.	Material	Enter names and pertinent information of all known chemical products. Enter UNK if material is not known. Include any which apply to chemical properties. (Definitions: ph = Potential for Hydrogen (Corrosivity), IDLH = Immediately Dangerous to Life and Health, F.P. = Flash Point, I.T. = Ignition Temperature, V.P. = Vapor Pressure, V.D. = Vapor Density, S.G. = Specific Gravity, LEL = Lower Explosive Limit, UEL = Upper Explosive Limit)
20 - 23.	Hazard Monitoring	List the instruments which will be used to monitor for chemical.
24.	Decontamination Procedures	Check NO if modifications are made to standard decontamination procedures and make appropriate Comments including type of solutions.
25 - 27.	Site Communications	Enter the radio frequency(ies) which apply.
28 - 29.	Medical Assistance	Enter comments if NO is checked.
30.	Site Map	Sketch or attach a site map which defines all locations and layouts of operational zones. (Check boxes are mandatory to be identified.)
31.	Entry Objectives	List all objectives to be performed by the Entry Team in the Exclusion Zone and any parameters which will alter or stop entry operations.
32 - 33.	SOP s, Safe Work Practices, and Emergency Procedures	List in Comments if any modifications to SOP s and any emergency procedures which will be affected if an emergency occurs while personnel are within the Exclusion Zone.
34 - 36.	Safety Briefing	Have the appropriate individual place their signature in the box once the Site Safety and Control Plan is reviewed. Note the time in box 34 when the safety briefing has been completed.

**SKILL SHEET # 2**  
**Use Approved Reference Resources**

<b>JPR: 7.2.2, 7.2.2(B), 7.2.5, 7.2.5(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Use approved reference resources to interpret hazard and response information.
<b>Performance Outcome</b>	The candidate, given a scenario and reference resources will interpret the hazard and response information.
<b>Equipment Required:</b> A Hazardous Materials scenario, an assignment in an IAP, and approved reference resources.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
1. Collect hazard and response information.				
<b>C</b> 2. Interpret hazard and response information.				
3. Identify signs and symptoms of exposures (including target organ effects).				
4. Determine radiation exposure rates from containers.				
5. Communicate hazard and response information.				
<b>Total</b>	<b>Score needed to pass</b>		<b>4</b>	

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

## **Explanatory Material for Skill Sheet #2**

Hazardous materials technicians must have the knowledge and skills necessary to interpret the results of the incident analysis include weather conditions (current and projected); terrain; time of day; buildings; people; bodies of water; hazard and response information collected; results of detection, monitoring, and sampling; condition of container; and predicted behavior of the container and its contents. Approved resources include printed and technical resources, computer databases, and specialists in the field.

Proctors are required to develop a scenario where candidates must utilize the resources such as ALOHA, CAMEO, WISER, NIOSH and SDS to interpret and predict the behavior of the container and the chemical depending on the weather conditions, terrain, time of day, buildings, people, bodies of water, hazard and response information collected, results of detection, monitoring and sampling.

The equipment available to the Authority Having Jurisdiction (AHJ) must be able to support this evaluation.



**SKILL SHEET # 3**  
**Sampling Techniques**

<b>JPR: 7.2.1, 7.2.1(B), 7.2.2, 7.2.2(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Perform sampling techniques to identify hazards associated with solid, liquid, and gaseous substances.
<b>Performance Outcome</b>	The candidate shall select the appropriate PPE and equipment. Candidate shall perform sampling techniques on a solid, a liquid, and a gas, identify the hazards associated with the given material, and collect a sample.
<b>Equipment Required:</b> Selection of various PPE ensembles, colorimetric (e.g. tubes, chips, papers, strips, reagents), electrochemical cells (e.g. toxic gas sensors), flammable gas/LEL, noncontact thermal detection device, oxygen concentration, photoionization detector (PID), biological detection and radiation detection and monitoring.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

STEPS FOR SKILL COMPLETION	Initial		Retest	
	Yes	No	Yes	No
1. Ensure proper detection, monitoring, or sampling method and equipment is chosen.				
2. Ensure that candidate selects appropriate PPE.				
3. Collect a sample of the material.				
<b>Read, interpret, and report the results of the following tests:</b>				
<b>C</b> 4. Colorimetrics (e.g., tubes, chips, papers, strips, reagents)				
<b>C</b> 5. Radiation detection and monitoring equipment				
<b>C</b> 6. Air Monitoring Equipment (Toxic gas, Flammable Gas LEL, Oxygen Concentration)				
<b>C</b> 7. Photoionization Detector (PID)				
<b>C</b> 8. Noncontact Thermal Detection Equipment				
9. Dispose of sample in accordance with appropriate regulations.				
10. Decontaminate equipment and return to operational state per manufacturer’s instructions.				
11. Complete required reports and supporting documentation.				
<b>Total</b>				
	<b>Score needed to pass</b>			<b>9</b>

\_\_\_\_\_  
Candidate Name

\_\_\_\_\_  
Candidate Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Proctor Name

\_\_\_\_\_  
Proctor Signature

\_\_\_\_\_  
Retest Proctor Name

\_\_\_\_\_  
Retest Proctor Signature

### **Explanatory Material for Skill Sheet #3**

Hazardous materials technicians must have the knowledge and skills necessary to operate and interpret readings for each of the following pieces of detection and monitoring equipment: colorimetric (e.g., tubes, chips, papers, strips, reagents); electrochemical cells (e.g., toxic gas sensors), flammable gas/LEL noncontact thermal detection, oxygen concentration, photoionization detector (PID) devices; and radiation detection and monitoring devices.

Proctors are required to develop a scenario where candidates must obtain a solid, liquid and gas sample. The equipment available to the Authority Having Jurisdiction (AHJ) must be able to support this evaluation. The proctor has the flexibility to choose a single colorimetric device (e.g., tubes, chips, papers, strips, reagents). Candidates must also demonstrate proficiency and understanding of the use of a 4-gas meter, PID, radiation detection/monitoring equipment and thermal detection equipment (e.g. Thermal Imaging Camera (TIC) or temperature heat gun).

**SKILL SHEET # 4**  
**Don, Work In, and Decon Wearing Liquid Splash Protection Clothing**

<b>JPR: 7.3.2, 7.3.2(B), 7.4.2, 7.4.2(B), 7.4.3.1, 7.4.3.2, 7.4.3.2(B), 7.4.3.3(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Select, inspect, don and work in appropriate PPE; product control of a liquid, undergo technical decontamination, and doff PPE.
<b>Performance Outcome</b>	<p>The candidate will select appropriate PPE, correctly don, work in, and undergo technical decontamination.</p> <p>Select, inspect and use PPE, select and use approved control agents and equipment; control leaks on containers and their closures (patching, plugging, sealing closures, remote valve shutoff, closing valves, repositioning container; replace missing plugs, and tightening loose fittings); decontaminate tools and equipment; inspect and maintain tools and equipment; and requirements for reporting and documenting product control operations.</p>
<b>Equipment Required:</b> Liquid splash protective ensemble, SCBA, decontamination equipment, an assignment/scenario and prop for simulated product release.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	Yes	No	Yes	No
<b>C</b> 1. Choose the correct PPE for the situation/scenario given.				
2. Don liquid-splash PPE and secure closures.				
3. Perform pre-entry checks.				
<b>C</b> 4. Perform product control and any other given work assignment.				
5. Undergo technical decontamination.				
6. Doff PPE appropriately.				
<b>Total</b>	Score needed to pass		5	

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

## SKILL SHEET # 5

### Don, Work In, and Decon Wearing Vapor Protective Clothing

<b>JPR: 7.3.2, 7.3.2(B), 7.4.2, 7.4.2(B), 7.4.3.1, 7.4.3.2, 7.4.3.2(B), 7.4.3.3(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Select, inspect, don and work in vapor protective clothing. Product control of a gas, undergo technical decontamination, and doff vapor protective clothing.
<b>Performance Outcome</b>	<p>The candidate, given PPE, an SCBA, and decon equipment, will correctly don, work in and undergo technical decon while wearing vapor protection PPE.</p> <p>Select, inspect and use PPE, select and use approved control agents and equipment; control leaks on containers and their closures (patching, plugging, sealing closures, remote valve shutoff, closing valves, repositioning container; replace missing plugs, and tighten loose fittings); decontaminate tools and equipment; inspect and maintain tools and equipment; and requirements for reporting and documenting product control operations.</p>
<b>Equipment Required:</b> Vapor protective ensemble, SCBA, decontamination equipment, an assignment/scenario and prop for simulated product release.	
<b>Critical Skills are identified by a bold type "C".</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	Yes	No	Yes	No
<b>C</b> 1. Choose the correct PPE for the situation/scenario given.				
2. Don vapor PPE.				
3. Perform preentry checks.				
<b>C</b> 4. Perform given work assignment.				
5. Undergo technical decontamination.				
6. Doff PPE appropriately.				
<b>Total</b>			<b>Score needed to pass</b>	<b>5</b>

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

**SKILL SHEET # 6**  
**Inspect, Test, Maintain, and Document Chemical Protective Clothing**

<b>JPR: 7.3.2, 7.4.2(A),(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Inspect, test, maintain, and document chemical protective clothing serviceability.
<b>Performance Outcome</b>	The candidate, given adequate PPE and equipment for PPE maintenance, will demonstrate their ability to inspect, test, and document the maintenance of protective clothing.
<b>Equipment Required:</b> Appropriate PPE, manufacture instructions, PPE log forms, pressure test kit and other manufacturer's required equipment.	
<b>Critical Skills are identified by a bold type "C".</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

STEPS FOR SKILL COMPLETION	<i>Initial</i>		<i>Retest</i>	
	Yes	No	Yes	No
<b>Inspection</b>				
1. Ensure the suit's serviceability.				
2. Visually inspect both the interior and exterior of the suit looking for damage or defects.				
3. Visually inspect the suit for any changes to the suit material.				
4. Check to ensure the zipper functions correctly.				
5. Check the function of all valves.				
<b>Testing (Pressure Test)</b>				
<b>C</b> 6. Test suit according to manufacturer's recommendations.				
<b>Documentation</b>				
<b>C</b> 7. Document all findings during the inspection and remove any suits with defects or malfunctions from service.				
8. Return to proper storage.				
<b>Total</b>	<b>Score needed to pass</b>		<b>7</b>	

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

**SKILL SHEET # 7**  
**Perform Mass Decon on Ambulatory and Nonambulatory Victims**

<b>JPR: 7.3.3, 7.3.3(B), 7.4.4.1 NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Perform mass decon on ambulatory and nonambulatory victims.
<b>Performance Outcome</b>	The candidate, working as a member of a group and given adequate PPE and applicable equipment, will demonstrate how to perform mass decontamination on ambulatory and nonambulatory victims.
<b>Equipment Required:</b> Appropriate PPE, hose lines, fog nozzle(s), contamination containers, monitoring/detection device, backboard or litter, bags and tags for personal property and/or evidence.	
<b>Critical Skills are identified by a bold type "C".</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
<b>C</b> 1. Ensure proper decontamination method has been chosen to minimize hazards.				
2. Ensure that all responders are wearing appropriate PPE for performing mass decontamination operations.				
3. Establish mass decontamination corridor for ambulatory and nonambulatory decontamination in an adequate location.				
4. Transfer the nonambulatory victims to a wash area of the decontamination station on an appropriate backboard/litter device.				
<b>C</b> 5. Decontaminate as required, and safeguard personal belongings and items.				
6. Remove victim's clothing and wash entire body using handheld hoses and appropriate equipment.				
7. Transfer the victims from the wash and rinse stations for medical evaluation.				
8. Complete required reports and supporting documentation.				
<b>Total</b>	<b>Score needed to pass</b>			<b>7</b>

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

## SKILL SHEET # 8

### Perform Technical Decon on Entry Team Members and Ambulatory and Nonambulatory Victims

<b>JPR: 7.3.3, 7.3.3(B), 7.4.4.2 NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Perform technical decon on entry team members and ambulatory and nonambulatory victims.
<b>Performance Outcome</b>	The candidate, working as a member of a group and given adequate PPE and applicable equipment, will demonstrate how to perform technical decontamination on ambulatory and nonambulatory victims.
<b>Equipment Required:</b> Appropriate PPE, hose lines, fog nozzle(s), contamination containers, monitoring/detection device, sponges, brushes, backboard or litter, bags and tags for personal property and/or evidence.	
<b>Critical Skills are identified by a bold type “C</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	Yes	No	Yes	No
<b>C</b> 1. Ensure proper decontamination method has been chosen to minimize hazards.				
2. Ensure that all responders are wearing appropriate PPE for performing technical decontamination operations.				
3. Establish technical decontamination corridor for ambulatory and nonambulatory decontamination in an adequate location.				
4. Transfer the nonambulatory victims to a wash area of the decontamination station on an appropriate backboard/litter device.				
<b>C</b> 5. Decontaminate as required, and safeguard personal belongings and items.				
6. Remove clothing and wash each victim’s entire body using handheld hoses, sponges, and/or brushes and then rinse.				
7. Direct the victims from the wash and rinse stations for medical evaluation.				
8. Complete required reports and supporting documentation.				
<b>Total</b>			<b>Score needed to pass</b>	
			<b>7</b>	

\_\_\_\_\_

Candidate Name Candidate Signature Date

\_\_\_\_\_

Proctor Name Proctor Signature

\_\_\_\_\_

Retest Proctor Name Retest Proctor Signature

**SKILL SHEET # 9**  
**Plug and Patch a Leaking Container**

<b>JPR: 7.2.3, 7.2.3(B), 7.4.3.2, 7.4.3.2(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Plug and patch a leaking container.
<b>Performance Outcome</b>	The candidate shall select appropriate PPE and tools and will demonstrate their ability to plug and patch a leaking container.
<b>Equipment Required:</b> Appropriate PPE, plugging and patching kits, container with holes, additional hand tools.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
1. Ensure proper product control technique is chosen and that the container is evaluated and the level of risk is assessed.				
2. Ensure that all responders involved in the control function are wearing appropriate PPE for performing plugging and patching operations and that appropriate hand tools have been selected.				
3. Select a location to efficiently and safely perform the operation(s) and communicate the condition of the container to the IC.				
4. Avoid direct contact with the hazardous material.				
5. Determine the location of the leak.				
6. Attempt to position container so that the location of leak is in the uppermost position.				
<b>C</b> 7. Use the proper tools and equipment to control and plug and patch the leak.				
8. Decon tools and equipment and complete required reports and supporting documentation.				
<b>Total</b>			<b>Score needed to pass</b>	<b>7</b>

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	



**SKILL SHEET # 10**  
**Control a Leak from a Pressurized Container**

<b>JPR: 7.4.3.2, 7.4.3.2(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Apply appropriate leak control measures to stop the flow of product from a leaking pressurized container.
<b>Performance Outcome</b>	The candidate shall select appropriate PPE and tools and will correctly demonstrate how to stop the flow of product from a leaking container.
<b>Equipment Required:</b> Appropriate PPE, tools and equipment for controlling a leak, simulated pressurized container with holes and additional hand tools.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
1. Ensure proper product control technique is chosen.				
2. Ensure that all responders involved in the control function are wearing appropriate PPE for product control and that appropriate tools and equipment have been selected.				
3. Select a location to efficiently and safely perform the operation.				
4. Avoid direct contact with the hazardous material.				
5. Determine the location of the leak.				
6. Attempt to position container to best control the leak.				
<b>C</b> 7. Control the leak.				
8. Complete required reports and supporting documentation.				
<b>Total</b>			<b>Score needed to pass 7</b>	

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

**SKILL SHEET # 11**  
**Ground and Bond and Liquid Product Transfer from a Nonpressure Container**

<b>JPR: 7.4.3.4, 7.4.3.4(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Ground and bond nonpressurized containers. Conduct a liquid transfer operation involving a leaking nonpressurized container.
<b>Performance Outcome</b>	The candidate shall select appropriate PPE, tools, a leaking container, and a scenario, will correctly ground and bond and conduct a liquid transfer operation.
<b>Equipment Required:</b> Adequate PPE, a hazardous materials scenario, a leaking container, recovery container, grounding and bonding equipment and appropriate tools and equipment.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
1. Ensure proper product control technique is chosen.				
2. Ensure that all responders involved in the control function are wearing appropriate PPE for performing liquid transfer operations and that appropriate hand tools have been selected.				
3. Air monitoring established.				
4. Select a location to efficiently and safely perform the bonding and grounding operation.				
5. Establish ground field.				
<b>NOTE: Check resistance between grounding rod and earth.</b>				
<b>C</b> 6. Ground the containers.				
7. Bond the containers.				
<b>NOTE: Check resistance between bonding clamp and container.</b>				
8. Ensure recovery container is compatible with liquid product.				
<b>C</b> 9. Use approved liquid transfer method and transfer product to recovery container and suppress vapors.				
10. Inspect and decon tools and complete required reports and supporting documentation.				
<b>Total</b>			<b>Score needed to pass</b>	
			<b>8</b>	

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

**SKILL SHEET # 12**  
**Remote Valve Shutoff/Emergency Shutoff Device**

<b>JPR: 7.4.3.1(B), 7.4.3.2(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Perform a remote valve shutoff or activate an emergency shutoff device.
<b>Performance Outcome</b>	The candidate shall select appropriate PPE and will show their ability to operate the equipment correctly.
<b>Equipment Required:</b> Appropriate PPE, prop with emergency remote shutoff device.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
1. Ensure proper product control technique is chosen.				
2. Ensure that all responders involved in control functions are wearing appropriate PPE for performing remote valve shutoff operations.				
3. Identify and locate the emergency remote control valve and/or emergency shutoff device.				
<b>C</b> 4. Operate the remote control valve and/or emergency shutoff device properly.				
5. Inspect and decon tools and complete required reports and supporting documentation				
<b>Total</b>			<b>Score needed to pass</b>	<b>4</b>

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

**SKILL SHEET # 13**  
**Tighten or Close Leaking Valves, Packing Glands, and/or Fittings**

<b>JPR: 7.4.3.2, 7.4.3.2(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Tighten or close leaking valves, closures, packing glands, and/or fittings.
<b>Performance Outcome</b>	The candidate shall select appropriate PPE, tools and equipment and will correctly tighten or close the object given in the scenario.
<b>Equipment Required:</b> Appropriate PPE, a hazardous materials scenario, a container prop with either a leaking valve, closure, packing gland, or fitting.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
1. Ensure that all responders involved in the control function are wearing appropriate PPE and that appropriate hand tools have been selected.				
2. Select a location to efficiently and safely perform tightening or closing operations.				
3. Remove obstructions from container if possible.				
4. Attempt to position container so that valve or leak is in the uppermost position.				
<b>C</b> 5. Tighten or close leaking valves, closures, packing glands, and/or fittings as appropriate.				
<b>Total</b>			<b>Score needed to pass</b>	
			<b>4</b>	

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

**SKILL SHEET # 14**  
**Dome Clamp**

<b>JPR: 7.4.3.2, 7.4.3.2(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Apply a dome clamp.
<b>Performance Outcome</b>	The candidate shall demonstrate the ability to control liquid leaks on an MC-306/DOT 406 training dome by properly applying a dome clamp.
<b>Equipment Required:</b> Adequate PPE, dome clamp, MC-306/DOT 406 simulator.	
<b>Critical Skills are identified by a bold type "C".</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
1. Identify tank capacity by using markings or other resources.				
2. Identify precautions for fire control.				
3. Approach the simulator safely.				
4. Eliminate ignition sources.				
<b>C</b> 5. Locate leaking dome and properly apply dome clamp.				
6. Evaluate the effectiveness of control functions.				
<b>Total</b>			<b>Score needed to pass</b>	<b>5</b>

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

**SKILL SHEET # 15**  
**Overpack a Nonbulk Container and/or Radioactive Materials Package**

<b>JPR: 7.4.3.3, 7.4.3.3(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Overpack a nonbulk container and/or radioactive materials package.
<b>Performance Outcome</b>	The candidate shall select appropriate PPE and equipment and will correctly overpack the container.  <b>Note:</b> The slide-in, rolling slide-in, or slip-over methods should all be taught, however, only one needs to be tested.
<b>Equipment Required:</b> Adequate PPE, container or package, overpack container, container handling equipment, labeling equipment.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
1. Ensure proper product control technique is chosen.				
2. Ensure that all responders involved in the control function are wearing appropriate PPE for performing overpacking operations and that appropriate hand tools have been selected.				
3. Select a location to efficiently and safely perform the overpacking operation.				
4. Avoid direct contact with the hazardous material to the extent possible, including residue on the patched container or package.				
5. Place the damaged container or package in appropriate position using safe lifting techniques.				
6. Properly overpack the container or package.				
<b>C</b> 7. Close, mark, and label the overpack container. <b>NOTE: Use the UN # and name of material to mark and label containers.</b>				
8. Inspect and decon tools; complete required reports and supporting documentation				
<b>Total</b>			<b>Score needed to pass</b>	<b>7</b>

Candidate Name	Candidate Signature	Date
Proctor Name	Proctor Signature	
Retest Proctor Name	Retest Proctor Signature	

**SKILL SHEET # 16**  
**Perform, Evaluate and Terminate a Hazardous Material Incident**

<b>JPR: 7.2.4, 7.2.4(B), 7.4.1, 7.4.1(B), 7.5.1, 7.5.1(B), 7.6.1, 7.6.1(B)</b> <b>NFPA 1072, 2017 Edition</b>	<b>Tasks:</b> Perform, evaluate and terminate a hazardous material incident based off the prepared hazmat IAP.
<b>Performance Outcome</b>	The candidate, given a completed hazmat IAP will perform, evaluate and terminate a hazardous material incident.
<b>Equipment Required:</b> Completed site safety plan from Skill Sheet #1, approved communications equipment, reporting and recording documents.	
<b>Critical Skills are identified by a bold type “C”.</b> Any critical skill that is not completed is considered a failure of the entire Skill Sheet.	
<b>Safety:</b> A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.	

<b>STEPS FOR SKILL COMPLETION</b>	<i>Initial</i>		<i>Retest</i>	
	Yes	No	Yes	No
1. Perform assigned duties in the Hazardous Materials Branch or group organization (May utilize any skill sheet scenario from 9 - 15).				
2. Communicate observations to Hazardous Materials Branch Director/Supervisor, ICS operations section chief, or Incident Commander.				
3. Compare actual behavior of material and container to predicted behavior.				
4. Determine effectiveness of response options and actions in accomplishing response objectives.				
5. Review response actions and discuss and evaluate effectiveness and alternatives.				
6. Conduct debriefing and response critique.				
<b>Total</b>	<b>Score needed to pass</b>			<b>5</b>

\_\_\_\_\_

Candidate Name Candidate Signature Date

\_\_\_\_\_

Proctor Name Proctor Signature

\_\_\_\_\_

Retest Proctor Name Retest Proctor Signature