

# Hazardous Materials Technician

## Skill Sheet Package

Based on *NFPA 1072: Standard for Professional Competence of Responders to Hazardous Materials Incidents*, 2017 Edition.



## Tennessee Commission on Firefighting

June 2019

# Certification Criteria

## Hazardous Materials Technician



### Pre-Requisites

- Candidate must be 18 years of age
- High School Diploma/GED
- Candidate must be Certified at the Hazardous Materials First Responder Awareness and Operational levels.

### Certification Requirements

To be issued certification as a Hazardous Materials Technician, the candidate will:

- Show successful completion of the above pre-requisite requirement. This must be documented on file at the Tennessee Commission on Firefighting.
- Complete required training hours (minimum 80) to meet NFPA 1072 (Chapter 7)
- Submit Instructional JPR Verification Sheet
- Written Examination**
  - Perform to a minimum 70% competency on a 100-question examination for Hazardous Materials Technician.
    - Retest after 15 days and must be passed within one year of passing the practical.
- Practical Examination**
  - Successfully complete a skills evaluation (2 skill sheets randomly selected by the TFFC), to a minimum of 70% competency and successful completion of all critical points.
    - One retest allowed at the testing session. Any other practical retesting must be completed after 15 days and at a location where required props and equipment are available.

Basis: Tennessee Commission on Firefighting Personnel Standards & Education, Rules Chapter 0360-03- Requirements for Certified Hazardous Materials Technician.



# Tennessee Fire Commission

## Hazardous Materials Technician

### Instructional JPR Verification Sheet

**Full Name:** \_\_\_\_\_ **Fire Department:** \_\_\_\_\_

This Instructional JPR Verification Sheet is to be used in conjunction with the Tennessee Fire Commission Hazardous Materials Technician Skill Sheets. These skills meet all the requirements of NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, Chapter 7, 2017 edition. Each of these skills should be taught and assessed during the course. This form should be submitted by the Instructor for Certification.

**Practical Examination for Certification:** Skills testing will be conducted using a minimum of 2 of the Skills Sheets listed below. The skills will be randomly drawn by the TFFC Coordinator and administered by an approved evaluator after all training hours have been completed. For successful completion of the practical examination, a minimum 70% competency (including critical points) is required for certification.

Skill Sheet	Primary Task	JPR(s) Covered
01	Radiation Detection and Monitoring	7.1.7, 7.2.1, 7.2.2
02	Gas/Vapor Detection, Monitoring & Sampling	7.1.7, 7.2.1, 7.2.2
03	Solid and Liquid Sampling	7.1.7, 7.2.2
04	Identifying Stress(es) on the Container	7.1.7, 7.2.3
05	Predicting Behavior	7.1.7, 7.2.4
06	Estimating Outcomes	7.1.7, 7.2.5
07	Response Objectives & Options	7.3.1
08	Personal Protective Equipment (PPE) Selection	7.3.2
09	Decontamination Method Selection	7.3.3
10	Action Plan Development	7.1.7, 7.3.4
11	Performing Assigned IMS/ICS Duties	7.1.7, 7.4.1
12	Personal Protective Equipment Use	7.1.7, 7.4.2
13	Product Control	7.1.7, 7.4.3.1
14	Controlling Container Leaks	7.1.7, 7.4.3.2
15	Overpacking Nonbulk & Radioactive Materials Containers	7.1.7, 7.4.3.3
16	Liquid Product Transfer	7.1.7, 7.4.3.4
17	Mass Decontamination	7.1.7, 7.4.4.1
18	Technical Decontamination	7.1.7, 7.4.4.2
19	Evaluating & Reporting Progress	7.1.7, 7.5.1
20	Terminating the Incident	7.1.7, 7.6.1
Course Location:		Course Date:
Instructor Printed Name:		Instructor Signature:
Candidate Printed Name:		Candidate Signature:



# RADIATION DETECTION AND MONITORING

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.2.1, 7.2.2

Hazardous Materials Technician

## HMT Skill Sheet - 01

The candidate will classify hazardous materials/WMD and verify the presence and concentrations of hazardous materials through detection, monitoring, and sampling at a hazardous materials/WMD incident, collect and interpret hazard and response information at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with released identified and unidentified hazardous materials; an assignment in an incident action plan (IAP); policies and procedures; approved resources; detection and monitoring equipment; and personal protective equipment (PPE).

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
	P	F	P	F
<b>Safely performs the following steps:</b>				
<b>1. Select proper PPE - CRITICAL POINT</b>				
2. Determine radiation dose rates from radioactive material labels				
3. Use radiation detection and monitoring devices to classify hazardous materials by basic hazard categories, verify the presence of hazardous materials, or determine the concentration of hazardous materials				
4. Monitor, read, interpret, record, and communicate readings from detection, monitoring, and sampling equipment according to the manufacturers' specifications and recommendations				
5. Complete required reports and supporting documentation for detection, monitoring, and sampling operations and verbally communicates findings				
6. Collect and interpret hazard and response information				
7. Identify signs and symptoms of exposure to hazardous materials/WMD, including target organ effects of exposure to hazardous materials/WMD				
8. Safety procedures followed				
9. Hazards avoided and minimized				
<b>Candidate must successfully perform 7/9 steps including ALL CRITICAL POINTS</b>	Score: __/9		Score: __/9	

**Evaluator Notes**



# RADIATION DETECTION AND MONITORING

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.2.1, 7.2.2

Hazardous Materials Technician

## HMT Skill Sheet - 01

The candidate will classify hazardous materials/WMD and verify the presence and concentrations of hazardous materials through detection, monitoring, and sampling at a hazardous materials/WMD incident, collect and interpret hazard and response information at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with released identified and unidentified hazardous materials; an assignment in an incident action plan (IAP); policies and procedures; approved resources; detection and monitoring equipment; and personal protective equipment (PPE).

**Expected time to complete skill(s) is 30 minutes**

<b>Evaluator Print Name &amp; Signature:</b>	<b>Date</b>	<b>Overall Skill Sheet Score</b>	
		Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
<b>Re-Test Evaluator Print Name &amp; Signature:</b>	<b>Overall Skill Sheet Re-Test Score</b>		
	Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
<b>Candidate Print Name &amp; Signature:</b>		<b>Candidate: Print Name or Candidate #</b>	
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.			
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.			



# GAS DETECTION, MONITORING, AND SAMPLING

Reference source: NFPA 1072, 2017 edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.2.1, 7.2.2

Hazardous Materials Technician

## HMT Skill Sheet - 02

The candidate will classify hazardous materials/WMD and verify the presence and concentrations of hazardous materials through detection, monitoring, and sampling at a hazardous materials/WMD incident, collect and interpret hazard and response information at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with released identified and unidentified hazardous materials; an assignment in an incident action plan (IAP); policies and procedures; approved resources; detection and monitoring equipment; and personal protective equipment (PPE).

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
	P	F	P	F
<b>Safely performs the following steps:</b>				
1. Select proper PPE				
2. Use each of the following types of detection, monitoring, and gas sampling equipment to either classify hazardous materials by basic hazard categories, verify the presence of hazardous materials or determine the concentration of hazardous materials				
3. Colorimetrics (e.g., tubes, chips, papers, strips, reagents)				
4. Electrochemical cells (e.g., toxic gas sensors)				
5. Flammable gas/LEL				
6. Noncontact thermal detection device				
7. Oxygen concentration				
8. Photoionization detector (PID)				
9. Monitor, read, interpret, record, and communicate readings from detection, monitoring, and gas sampling equipment according to the manufacturers' specifications and recommendations				
10. Complete required reports and supporting documentation for detection and monitoring operations and verbally communicates findings				
11. Collect and interpret hazard and response information				
12. Identify signs and symptoms of exposure to hazardous materials/WMD, including target organ effects of exposure to hazardous materials/WMD				
13. Safety procedures followed				
14. Hazards avoided and minimized				
<b>Candidate must successfully perform 10/14 steps including ALL CRITICAL POINTS</b>	Score: __/14		Score: __/14	



# GAS DETECTION, MONITORING, AND SAMPLING

Reference source: NFPA 1072, 2017 edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.2.1, 7.2.2

Hazardous Materials Technician

## HMT Skill Sheet - 02

The candidate will classify hazardous materials/WMD and verify the presence and concentrations of hazardous materials through detection, monitoring, and sampling at a hazardous materials/WMD incident, collect and interpret hazard and response information at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with released identified and unidentified hazardous materials; an assignment in an incident action plan (IAP); policies and procedures; approved resources; detection and monitoring equipment; and personal protective equipment (PPE).

**Expected time to complete skill(s) is 30 minutes**

### Evaluator Notes

<div style="text-align: center;"><b>Evaluator Notes</b></div>		
<b>Evaluator Print Name &amp; Signature:</b>	<b>Date</b>	<b>Overall Skill Sheet Score</b>
		Pass____ Fail____
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)		
<b>Re-Test Evaluator Print Name &amp; Signature:</b>		<b>Overall Skill Sheet Re-Test Score</b>
		Pass____ Fail____
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)		
<b>Candidate Print Name &amp; Signature:</b>		<b>Candidate: Print Name or Candidate #</b>
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.		
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.		



# SOLID AND LIQUID SAMPLING

Reference source: NFPA 1072, 2017 edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.2.1, 7.2.2

Hazardous Materials Technician

## HMT Skill Sheet - 03

The candidate will classify hazardous materials/WMD and verify the presence and concentrations of hazardous materials through detection, monitoring, and sampling at a hazardous materials/WMD incident, collect and interpret hazard and response information at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with released identified and unidentified hazardous materials; an assignment in an incident action plan (IAP); policies and procedures; approved resources; detection and monitoring equipment; and personal protective equipment (PPE).

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
Safely performs the following steps:	P	F	P	F
1. Select proper PPE				
2. Collect samples of a liquid and a solid				
3. Use sampling equipment to either classify hazardous materials by basic hazard categories, verify the presence of hazardous materials or determine the concentration of hazardous materials				
4. Monitor, read, interpret, record, and communicate readings from sampling equipment according to the manufacturers' specifications and recommendations				
5. Complete required reports and supporting documentation for detection, monitoring, and sampling operations and verbally communicates findings				
6. Collect and interpret hazard and response information				
7. Identify signs and symptoms of exposure to hazardous materials/WMD, including target organ effects of exposure to hazardous materials/WMD				
8. Safety procedures followed				
9. Hazards avoided and minimized				
<b>Candidate must successfully perform 7/9 steps including ALL CRITICAL POINTS</b>	Score: __/9		Score: __/9	

**Evaluator Notes**

<b>Evaluator Print Name &amp; Signature:</b>	<b>Date</b>	<b>Overall Skill Sheet Score</b>	
		Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
<b>Re-Test Evaluator Print Name &amp; Signature:</b>	<b>Overall Skill Sheet Re-Test Score</b>		
		Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
<b>Candidate Print Name &amp; Signature:</b>	<b>Candidate: Print Name or Candidate #</b>		

**Note to Evaluator(s):** By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.

**Note to Student:** Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at **ANY** time that you have a safety concern.





# IDENTIFYING STRESS(ES) ON THE CONTAINER

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.2.3

Hazardous Materials Technician

## HMT Skill Sheet - 04

The candidate will assess the condition of a container and its closures at a hazardous materials/WMD incident, given an incident involving hazardous materials/WMD; an assignment in an IAP; policies and procedures; the scope of the incident; identity of material(s) involved and their hazards, including results of detection, monitoring, and sampling; a container with required markings; and approved resources and PPE.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
Safely performs the following steps:	P	F	P	F
1. Assess the condition of the container and its closures				
2. Identify the type of damage and level of risk associated with the damage				
3. Identify stress(es) on the container				
4. Communicate the condition of the container and its closures and the level of risk associated with that condition				
5. Safety procedures are followed- <b>CRITICAL POINT</b>				
6. Hazards are avoided or minimized				
<b>Candidate must successfully perform 5/6 steps including ALL CRITICAL POINTS</b>	Score: ___/6		Score: ___/6	
<b>Evaluator Notes</b>				
Evaluator Print Name & Signature:	Date	Overall Skill Sheet Score		
		Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Re-Test Evaluator Print Name & Signature:	Overall Skill Sheet Re-Test Score			
		Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Candidate Print Name & Signature:	Candidate: Print Name or Candidate #			
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.				
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.				



# PREDICTING BEHAVIOR

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.2.4

Hazardous Materials Technician

## HMT Skill Sheet - 05

The candidate will predict the behavior of the hazardous materials/WMD involved in a hazardous materials/WMD incident, given an incident involving multiple hazardous materials/WMD; an assignment in an IAP; policies and procedures; physical and chemical properties of the materials involved; results of detection, monitoring, and sampling; condition of the container (damage and stress); surrounding conditions; and approved reference sources.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps		Test		Retest	
Safely performs the following steps:		P	F	P	F
1. Predict the likely behavior of materials and their containers when multiple materials are involved					
2. Identify reactivity issues associated with mixing various hazardous materials					
3. Communicate the predicted behavior					
<b>Candidate must successfully perform 3/3 steps including ALL CRITICAL POINTS</b>		Score: __/3		Score: __/3	
<p><b>Evaluator Notes</b></p>					
Evaluator Print Name & Signature:		Date	Overall Skill Sheet Score		
			Pass ___	Fail ___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)					
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score			
		Pass ___	Fail ___		
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)					
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #			
<p><b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.</p>					
<p><b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.</p>					



# ESTIMATING OUTCOMES

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.2.5

Hazardous Materials Technician

## HMT Skill Sheet - 06

The candidate will estimate the potential outcomes at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP, policies and procedures, the likely behavior of the container and its contents, and approved resources and equipment.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps		Test		Retest	
Safely performs the following steps:		P	F	P	F
1. Use approved resources and equipment					
2. Determine concentrations of materials within the endangered area					
3. Identify the physical, health, and safety hazards within the endangered area					
4. Identify the areas of potential harm in the endangered area					
5. Estimate the potential outcomes in the endangered area					
6. Communicate the potential outcomes					
<b>Candidate must successfully perform 5/6 steps including ALL CRITICAL POINTS</b>		Score: __/6		Score: __/6	
<b>Evaluator Notes</b>					
Evaluator Print Name & Signature:		Date	Overall Skill Sheet Score		
			Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)					
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score			
		Pass___		Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)					
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #			
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.					
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.					



# RESPONSE OBJECTIVES & OPTIONS

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.3.1

Hazardous Materials Technician

## HMT Skill Sheet - 07

The candidate will develop and recommend to the incident commander or hazardous materials officer response objectives and action options at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment in an IAP; results of the incident analysis, including incident-related information, life safety risks, environmental risks, and property risks; available resources; and policies and procedures.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
Safely performs the following steps:	P	F	P	F
1. Develop response objectives for a hazardous materials incident				
2. Identify action options for each response objective				
<b>Candidate must successfully perform 2/2 steps including ALL CRITICAL POINTS</b>	Score: __/2		Score: __/2	
<b>Evaluator Notes</b>				
Evaluator Print Name & Signature:		Date	Overall Skill Sheet Score	
			Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score		
		Pass___ Fail___		
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #		
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.				
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.				



# PERSONAL PROTECTIVE EQUIPMENT (PPE) SELECTION

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.3.2

Hazardous Materials Technician

## HMT Skill Sheet - 08

The candidate will select the PPE ensemble required for a given response option at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, results of the incident analysis, response objectives and options for the incident, approved references, and policies and procedures.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps		Test		Retest	
Safely performs the following steps:		P	F	P	F
1. Select PPE ensemble for a specified response option based on all hazards identified					
2. Determine the effectiveness of protective clothing based on its uses and limitations.					
<b>Candidate must successfully perform 2/2 steps including ALL CRITICAL POINTS</b>		Score: __/2		Score: __/2	
<b>Evaluator Notes</b>					
Evaluator Print Name & Signature:		Date	Overall Skill Sheet Score		
			Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)					
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score			
		Pass___		Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)					
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #			
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.					
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.					



# DECONTAMINATION METHOD SELECTION

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.3.3

Hazardous Materials Technician

## HMT Skill Sheet - 09

The candidate will select the decontamination method for a given response option at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, results of the incident analysis, response objectives and options for the incident, available resources, and policies and procedures.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
Safely performs the following steps:	P	F	P	F
1. Select decontamination procedures (operations and methods).				
2. Identify the equipment required to implement decontamination procedure (operations and methods).				
<b>Candidate must successfully perform 2/2 steps including ALL CRITICAL POINTS</b>	Score: __/2		Score: __/2	
<b>Evaluator Notes</b>				
Evaluator Print Name & Signature:		Date	Overall Skill Sheet Score	
			Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score		
		Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #		
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.				
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.				



# ACTION PLAN DEVELOPMENT

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.3.4

Hazardous Materials Technician

## HMT Skill Sheet - 10

The candidate will develop a plan of action for a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP, results of the incident analysis, response objectives and options for the given incident, available resources, and policies and procedures.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
Safely performs the following steps:	P	F	P	F
1. Prepare an action plan				
2. Identify site safety and control components				
<b>3. Identify points for a safety briefing- CRITICAL POINT</b>				
4. Identify pre-entry tasks				
5. Identify atmospheric and physical safety hazards when incident involves a confined space				
6. Preserve and collect any legal evidence				
7. The developed plan meets the response objectives				
8. The plan is within the capability of available personnel, PPE, and control equipment				
<b>Candidate must successfully perform 6/8 steps including ALL CRITICAL POINTS</b>	Score: ___/8		Score: ___/8	
<b>Evaluator Notes</b>				
Evaluator Print Name & Signature:		Date	Overall Skill Sheet Score	
			Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score		
		Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #		
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.				
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.				



# PERFORMING ASSIGNED IMS/ICS DUTIES

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.4.1

Hazardous Materials/WMD Technician

## HMT Skill Sheet - 11

The candidate will perform assigned hazardous materials branch or group functions within the incident command system (ICS) at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment in an IAP; results of the incident analysis; policies and procedures, including an emergency response plan and standard operating procedures; the IAP; and approved resources.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
Safely performs the following steps:	P	F	P	F
1. Perform the duties and responsibilities of an assigned function in the hazardous materials branch or group organization				
2. Communicate observations to hazardous materials branch director/group supervisor, ICS operations section chief, or IC				
<b>Candidate must successfully perform 2/2 steps including ALL CRITICAL POINTS</b>	Score: __/2		Score: __/2	
<b>Evaluator Notes</b>				
Evaluator Print Name & Signature:	Date	Overall Skill Sheet Score		
		Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score		
		Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #		
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.				
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.				





# PERSONAL PROTECTIVE EQUIPMENT USE

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.4.2

Hazardous Materials Technician

## HMT Skill Sheet - 12

The candidate will don, work in, and doff PPE at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP, policies and procedures, results of the incident analysis, response objectives and options for the incident, and PPE ensembles as identified in the IAP.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps		Test		Retest	
Safely performs the following steps:		P	F	P	F
1. Inspect, don, work in, going through technical decontamination while wearing PPE					
2. Properly maintain and store equipment					
3. Complete required reports and supporting documents for the use of PPE					
4. Safety procedures are followed- <b>CRITICAL POINT</b>					
5. Hazards are avoided or minimized					
<b>Candidate must successfully perform 4/5 steps including ALL CRITICAL POINTS</b>		Score: __/5		Score: __/5	
<b>Evaluator Notes</b>					
Evaluator Print Name & Signature:		Date	Overall Skill Sheet Score		
			Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)					
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score			
			Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)					
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #			
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.					
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.					



# PRODUCT CONTROL

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.4.3.1

Hazardous Materials Technician

## HMT Skill Sheet - 13

The candidate will perform product control techniques at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with release of product, an assignment in an IAP, results of the incident analysis, policies and procedures for product control, response objectives and options for the incident, and approved tools, equipment, control agents, and PPE.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
	P	F	P	F
<b>Safely performs the following steps:</b>				
1. Select and use PPE				
2. Protect exposures and personnel				
3. Select and use approved control agents and equipment on a release involving hazardous materials/WMD				
4. Use container control valves and remote emergency shutoff devices				
5. Perform product control techniques				
6. Product is controlled				
<b>7. Safety procedures are followed- CRITICAL POINT</b>				
8. Inspect and maintain tools and equipment				
9. Complete required and supporting documentation for product control operations				
<b>Candidate must successfully perform 7/9 steps including ALL CRITICAL POINTS</b>	Score: __/9		Score: __/9	

**Evaluator Notes**

Evaluator Print Name & Signature:	Date	Overall Skill Sheet Score	
		Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score	
		Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
Candidate Print Name & Signature:	Candidate: Print Name or Candidate #		

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**Note to Student:** Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at **ANY** time that you have a safety concern.



# CONTROLLING CONTAINER LEAKS

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.4.3.2

Hazardous Materials Technician

## HMT Skill Sheet - 14

The candidate will control leaks from containers and their closures at a hazardous materials/WMD incident, given three scenarios, including (1) a leak from a bulk or nonbulk pressure container or its closures, (2) a leak from a nonbulk liquid container or its closures, and (3) a leak from a bulk liquid container or its closures; an assignment in an IAP; results of the incident analysis; policies and procedures for controlling leaks from containers and/or their closures; and approved tools, equipment, and PPE.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
	P	F	P	F
<b>Safely performs the following steps:</b>				
1. Select and use PPE				
2. Select and use approved control agents and equipment				
3. Protect personnel and exposures				
4. Control leaks on containers and their closures (patching, plugging, sealing closures, remote valve shutoff, closing valves, repositioning container; replacing missing plugs, and tightening loose fittings)				
5. Decontaminate tools and equipment				
6. Hazards are avoided or minimized				
<b>7. Safety procedures are followed- CRITICAL POINT</b>				
8. Inspect and maintain tools and equipment				
9. Complete requirements for reporting and documenting product control operations				
<b>Candidate must successfully perform 7/9 steps including ALL CRITICAL POINTS</b>	Score: __/9		Score: __/9	

**Evaluator Notes**

Evaluator Print Name & Signature:	Date	Overall Skill Sheet Score	
		Pass ____	Fail ____
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score	
		Pass ____	Fail ____
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
Candidate Print Name & Signature:	Candidate: Print Name or Candidate #		

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# OVERPACKING NONBULK & RADIOACTIVE MATERIALS CONTAINERS

Reference source: NFPA 1072-2017, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications* 7.1.7, 7.4.3.3

Hazardous Materials Technician

## HMT Skill Sheet - 15

The candidate will overpack damaged or leaking nonbulk and radioactive materials containers at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment in an IAP; results of the incident analysis; a loaded damaged or leaking container; a suitable overpack container; policies and procedures; and approved tools, equipment, and PPE.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
	P	F	P	F
<b>Safely performs the following steps:</b>				
1. Select and use PPE				
2. Place a damaged or leaking nonbulk materials container into the overpack container				
3. Place a damaged or leaking radioactive materials container into an overpack container				
4. Follow safety procedures- <b>CRITICAL POINT</b>				
5. Hazards are avoided or minimized				
6. Decontaminate tools and equipment				
7. Inspect and maintain tools and equipment				
8. Complete requirements for reporting and documenting product control operations				
<b>Candidate must successfully perform 5/7 steps including ALL CRITICAL POINTS</b>	Score: __/7		Score: __/7	

### Evaluator Notes

<b>Evaluator Print Name &amp; Signature:</b>	<b>Date</b>	<b>Overall Skill Sheet Score</b>	
		Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
<b>Re-Test Evaluator Print Name &amp; Signature:</b>	<b>Overall Skill Sheet Re-Test Score</b>		
	Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
<b>Candidate Print Name &amp; Signature:</b>	<b>Candidate: Print Name or Candidate #</b>		

**Note to Evaluator(s):** By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.

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# LIQUID PRODUCT TRANSFER

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.4.3.4

Hazardous Materials Technician

## HMT Skill Sheet - 16

The candidate will transfer liquids from leaking nonpressure containers at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment in an IAP; results of the incident analysis; a leaking nonpressure container and a recovery container; policies and procedures for transferring liquids from leaking nonpressure containers; and approved tools, equipment, and PPE.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
Safely performs the following steps:	P	F	P	F
1. Select and use PPE				
2. Identify a compatible recovery container and transfer equipment				
3. Monitor for hazards				
4. Ground and bond containers				
5. Transfer liquid product from a leaking container to a recovery container				
6. Suppress vapors				
7. Decontaminate responders, tools, and equipment				
8. Inspect and maintain tools and equipment				
9. Complete reports and supporting documentation for product control operations				
<b>Candidate must successfully perform 7/9 steps including ALL CRITICAL POINTS</b>	Score: ___/9		Score: ___/9	

**Evaluator Notes**

Evaluator Print Name & Signature:	Date	Overall Skill Sheet Score	
		Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score	
		Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)			
Candidate Print Name & Signature:	Candidate: Print Name or Candidate #		

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# MASS DECONTAMINATION

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.4.4.1

Hazardous Materials Technician

## HMT Skill Sheet - 17

The candidate will perform mass decontamination for ambulatory and nonambulatory victims at a hazardous materials/WMD incident, given a hazardous materials/WMD incident requiring mass decontamination; an assignment in an IAP; results of the incident analysis; policies and procedures; and approved PPE, tools, and equipment.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
Safely performs the following steps:	P	F	P	F
1. Select and use suitable PPE				
2. Select a mass decontamination procedure to minimize the hazard				
3. Set up and implement mass decontamination operations for ambulatory and nonambulatory victims				
4. Evaluate the effectiveness of the mass decontamination process				
5. Safety procedures are followed- <b>CRITICAL POINT</b>				
6. Hazards are avoided or minimized				
7. Complete reporting and documentation requirements				
<b>Candidate must successfully perform 5/7 steps including ALL CRITICAL POINTS</b>	Score: __/7		Score: __/7	
<b>Evaluator Notes</b>				
Evaluator Print Name & Signature:		Date	Overall Skill Sheet Score	
			Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score		
		Pass___ Fail___		
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #		
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# TECHNICAL DECONTAMINATION

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.4.4.2

Hazardous Materials Technician

## HMT Skill Sheet - 18

The candidate will establish and implement technical decontamination in support of entry operations and for ambulatory and nonambulatory victims at a hazardous materials/WMD incident, given a hazardous materials/WMD incident requiring technical decontamination; an assignment in an IAP; results of the incident analysis; policies and procedures; and approved PPE, tools, and equipment.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
Safely performs the following steps:	P	F	P	F
1. Select and use PPE				
2. Select a technical decontamination procedure to minimize the hazard				
3. Set up and implement technical decontamination operations				
4. Safety procedures are followed- <b>CRITICAL POINT</b>				
5. Hazards are avoided or minimized				
6. Evaluate the effectiveness of the technical decontamination procedure				
7. Complete required reports and supporting documentation for technical decontamination operations.				
<b>Candidate must successfully perform 5/7 steps including ALL CRITICAL POINTS</b>	Score: __/7		Score: __/7	
<b>Evaluator Notes</b>				
Evaluator Print Name & Signature:		Date	Overall Skill Sheet Score	
			Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Re-Test Evaluator Print Name & Signature:			Overall Skill Sheet Re-Test Score	
			Pass___	Fail___
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #		
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<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.				



## EVALUATING & REPORTING PROGRESS

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.5.1

Hazardous Materials Technician

### HMT Skill Sheet - 19

The candidate will evaluate and report the progress of assigned tasks at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP, current incident conditions, response options and actions taken, and approved communication equipment.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps		Test		Retest	
Safely performs the following steps:		P	F	P	F
1. Compare predicted behavior of the material and its container to the actual behavior					
2. Determine effectiveness of response options and actions					
3. Communicate the status of response options and actions					
4. Modify the response options and actions based on the incident status review					
<b>Candidate must successfully perform 3/4 steps including ALL CRITICAL POINTS</b>		Score: ___/4		Score: ___/4	
<p><b>Evaluator Notes</b></p>					
Evaluator Print Name & Signature:		Date	Overall Skill Sheet Score		
			Pass ___	Fail ___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)					
Re-Test Evaluator Print Name & Signature:		Overall Skill Sheet Re-Test Score			
		Pass ___	Fail ___		
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)					
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #			
<p><b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.</p>					
<p><b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.</p>					





# TERMINATING THE INCIDENT

Reference source: NFPA 1072, 2017 Edition, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 7.1.7, 7.6.1

Hazardous Materials Technician

## HMT Skill Sheet - 20

The candidate will terminate a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP, policies and procedures, operational observations of response operations (incident information), and approved forms for documentation and reporting.

**Expected time to complete skill(s) is 30 minutes**

Performance Steps	Test		Retest	
Safely performs the following steps:	P	F	P	F
1. Communicate operational observations (incident information) at debriefings and critiques				
2. Complete, forward and file required reports, records, and supporting documentation				
<b>Candidate must successfully perform 2/2 steps including ALL CRITICAL POINTS</b>	Score: __/2		Score: __/2	
<b>Evaluator Notes</b>				
Evaluator Print Name & Signature:	Date	Overall Skill Sheet Score		
		Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Re-Test Evaluator Print Name & Signature:	Overall Skill Sheet Re-Test Score			
		Pass___	Fail___	
By my signature above, I verify that I am currently certified to the level I am testing (TN/PB/IFSAC)				
Candidate Print Name & Signature:	Candidate: Print Name or Candidate #			
<b>Note to Evaluator(s):</b> By your signature above, you verify that you are qualified to serve as an Tennessee Fire Commission Evaluator, have followed TFFC Skills Testing Policy and have witnessed that the above candidate has tested the above skills in their entirety.				
<b>Note to Student:</b> Skill will end when you state or indicate to the evaluator that you have completed all the identified steps. Notify the evaluator at <b>ANY</b> time that you have a safety concern.				