

# Hazardous Materials Operations June 2019

## 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 Operations



### Pre-Requisites

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

### Certification Requirements

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

- Show successful completion of the above pre-requisite requirement. This must be documented on file at the Tennessee Commission on Firefighting.

#### Written Examination

- Perform to a minimum 70% competency on a 100-question examination for Hazardous Materials Operations.
  - Retest after 15 days and must be passed within one year of passing the practical exam is allowed.

#### Practical Examination

- Successfully complete skills evaluation(s) (3 skill sheets randomly selected by the TFFC), to a minimum of 70% competency and successful completion of all critical points.

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



# TENNESSEE FIRE COMMISSION

## Hazardous Materials Operations

### Instructional JPR Verification Sheet

**Full Name:** \_\_\_\_\_

This Instructional JPR Verification Sheet should be used in conjunction with the Tennessee Fire Commission Hazardous Materials Operations Skill Sheets. These skills meet all the requirements of NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, Ch. 5, 6.2, 6.3, 6.4 & 6.6, 2017 Edition. Each of these skills should be taught and assessed during a course to prepare the student for testing.

**Practical Examination for Certification:** Skills testing will be conducted using a minimum of 1 skill from chapter 5 and 2 skills from chapter 6 of the JPRs 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. Please refer to the Certification Criteria for this level for a complete listing of the certification requirements.

Skill Sheet	Primary Task	JPR(s) Covered
01	Identify Potential Hazards	5.2.1
02	Identify Action Options	5.3.1
03	Action Plan Implementation	5.4.1
04	Emergency Decontamination	5.5.1
05	Progress Evaluation & Reporting	5.6.1
06	Personal Protective Equipment (PPE)	6.2.1
07	Product Control – Cargo Tanks	6.6.1
08	Product Control – Intermodal Tanks	6.6.1
09	Product Control – Fixed Facilities	6.6.1
10	Mass Decontamination	6.3.1
11	Technical Decontamination	6.4.1
Course Location:		Course Date:
Instructor Printed Name:		Instructor Signature:
Candidate Printed Name:		Candidate Signature:



# Identify Potential Hazards

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 5.2.1

Hazardous Materials Operations

## Skill Sheet HMO - 01

The candidate will identify the scope of the problem at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment, policies and procedures, and approved reference sources.

**Expected time to complete skill(s) is 10 minutes.**

Criteria/Performance Steps:			Test	
Safely performs the following steps:			P	F
1. Identify container types at a hazardous materials/WMD incident				
2. Identify materials at a hazardous materials/WMD incident				
3. Identify location of release at a hazardous materials/WMD incident				
4. Identify surrounding conditions at a hazardous materials/WMD incident				
5. Collect hazard information				
6. Communicate with pipeline operators or carrier representatives				
7. Describe the likely behavior of the hazardous materials or WMD and its container				
8. Describe the potential hazards, harm, and outcomes associated with that behavior and the surrounding conditions				
<b>Candidate must successfully perform 6/8 steps including ALL CRITICAL POINTS</b>				
			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)				
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 Testing Policies 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				



# Identify Action Options

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 5.3.1

Hazardous Materials Operations

## Skill Sheet HMO - 02

The candidate will identify the action options for a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment, policies and procedures, approved reference sources, and the scope of the problem, so that response objectives, action options, safety precautions, suitability of approved personal protective equipment (PPE) available, and emergency decontamination needs are identified.

**Expected time to complete skill(s) is 10 minutes.**

Criteria/Performance Steps:			Test	
Safely performs the following steps:			P	F
1. Identify response objectives and action options based on the scope of the problem and available resources				
2. Identify and take safety precautions				
3. Identify whether approved PPE is suitable for the incident conditions				
4. Identify emergency decontamination needs based on the scope of the problem				
Candidate must successfully perform <b>3/4</b> steps including <b>ALL CRITICAL POINTS</b>			Score: __/4	
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)				
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #		
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# Action Plan Implementation

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 5.4.1

Hazardous Materials Operations

## Skill Sheet HMO - 03

The candidate will perform assigned tasks at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment with limited potential of contact with hazardous materials/WMD, policies and procedures, the scope of the problem, approved tools, equipment, and PPE.

**Expected time to complete skill(s) is 10 minutes.**

Criteria/Performance Steps:			Test	
Safely performs the following steps:			P	F
1. Establish and maintain scene control				
2. Recognize and preserve evidence				
3. Choose, inspect, don, work in, and go through decontamination while wearing, and doffing approved PPE				
4. Isolate contaminated tools, equipment, and PPE				
5. Conduct gross decontamination of contaminated personnel, tools, equipment, and PPE in the field				
6. Clean, disinfect, and inspect approved tools, equipment, and PPE.				
7. Protect exposures and personnel				
8. <b>Follow safety procedures</b>				
9. Avoid or minimize hazards				
10. Complete assignment				
<b>Candidate must successfully perform 7/10 steps including ALL CRITICAL POINTS</b>			Score: __/10	
<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)				
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #		
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# Emergency Decontamination

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 5.5.1

Hazardous Materials Operations

## Skill Sheet HMO - 04

The candidate will perform emergency decontamination at a hazardous materials/WMD incident, given a hazardous materials/WMD incident that requires emergency decontamination; an assignment; scope of the problem; policies and procedures; and approved tools, equipment, and PPE for emergency decontamination.

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

Criteria/Performance Steps:			Test	
Safely performs the following steps:			P	F
1. Select an emergency decontamination method				
2. Set up emergency decontamination in a safe area				
3. Select proper PPE for the incident				
4. Use PPE in the proper manner				
5. Implement emergency decontamination				
6. Prevent spread of contamination				
7. Avoid hazards during emergency decontamination				
8. Protect exposures and personnel				
9. Follow safety procedures				
<b>Candidate must successfully perform 7/9 steps including ALL CRITICAL POINTS</b>				
			Score: __/9	
<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)				
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 Testing Policies and have witnessed that the above candidate has tested the above skills in their entirety.				
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# Progress Evaluation and Reporting

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 5.6.1

Hazardous Materials Operations

## Skill Sheet HMO - 05

The candidate will evaluate and report the progress of the assigned tasks for a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment, policies and procedures, status of assigned tasks, and approved communication tools and equipment.

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

Criteria/Performance Steps:		Test	
Safely performs the following steps:		P	F
1. Determine incident status			
2. Determine whether the response objectives are being accomplished			
3. Use approved communications tools and equipment			
4. Communicate the status of assigned tasks			
Candidate must successfully perform <b>3/4</b> steps including <b>ALL CRITICAL POINTS</b>		Score: __/4	
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/IF SAC)			
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #	
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# Personal Protective Equipment (PPE)

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 6.2.1

Hazardous Materials Operations

## Skill Sheet HMO - 06

The candidate will select, don, work in, and doff approved PPE at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; a mission-specific assignment in an IAP that requires use of PPE; the scope of the problem; response objectives and options for the incident; access to a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures; approved PPE; and policies and procedures.

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

Criteria/Performance Steps:			Test	
Safely performs the following steps:			P	F
1. Select PPE for the assignment				
2. Inspect, maintain, and store PPE				
3. Don PPE				
4. Work in PPE				
5. Doff PPE				
6. Go through decontamination (emergency and technical) while wearing the PPE				
7. Report and document the use of PPE				
8. Protect exposures and personnel				
9. Follow safety procedures				
10. Avoid or minimize hazards				
<b>Candidate must successfully perform 7/10 steps including ALL CRITICAL POINTS</b>			Score: __/10	
<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)				
Candidate Print Name & Signature:		Candidate: Print Name or Candidate #		
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# Product Control - Cargo Tanks

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 6.6.1

Hazardous Materials Operations

## Skill Sheet HMO - 07

The candidate will perform product control techniques with a limited risk of personal exposure at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with release of product; an assignment in an IAP; scope of the problem; policies and procedures; approved tools, equipment, control agents, and PPE; and access to a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures.

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

Criteria/Performance Steps:		Test	
Safely performs the following steps:		P	F
1. Select and use PPE			
2. Select and perform product control techniques to confine/contain the release with limited risk of personal exposure			
3. Use approved control agents and equipment on a release involving hazardous materials/WMD			
4. Use remote control valves and emergency shutoff devices on cargo tanks			
5. Perform product control techniques			
6. Protect exposures and personnel			
7. Follow safety procedures			
8. Avoid or minimize hazards			
9. Product is controlled			
10. Decontamination is completed			
11. Operations are reported and documented			
<b>Candidate must successfully perform 8/11 steps including ALL CRITICAL POINTS</b>		Score: __/11	
<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)			
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 Testing Policies and have witnessed that the above candidate has tested the above skills in their entirety.			
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# Product Control - Intermodal Tanks

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 6.6.1

Hazardous Materials Operations

## Skill Sheet HMO - 08

The candidate will perform product control techniques with a limited risk of personal exposure at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with release of product; an assignment in an IAP; scope of the problem; policies and procedures; approved tools, equipment, control agents, and PPE; and access to a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures.

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

Criteria/Performance Steps:			Test	
Safely performs the following steps:			P	F
1. Select and use PPE				
2. Select and perform product control techniques to confine/contain the release with limited risk of personal exposure				
3. Use approved control agents and equipment on a release involving hazardous materials/WMD				
4. Use remote control valves and emergency shutoff devices on intermodal tanks in transportation				
5. Perform product control techniques				
6. Protect exposures and personnel				
7. Follow safety procedures				
8. Avoid or minimize hazards				
9. Product is controlled				
10. Decontamination is completed				
11. Operations are reported and documented				
<b>Candidate must successfully perform 8/11 steps including ALL CRITICAL POINTS</b>				
				Score: __/11

**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)

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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



# Product Control - Fixed Facilities

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 6.6.1

Hazardous Materials Operations

## Skill Sheet HMO - 09

The candidate will perform product control techniques with a limited risk of personal exposure at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with release of product; an assignment in an IAP; scope of the problem; policies and procedures; approved tools, equipment, control agents, and PPE; and access to a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures.

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

Criteria/Performance Steps:			Test	
Safely performs the following steps:			P	F
1. Select and use PPE				
2. Select and perform product control techniques to confine/contain the release with limited risk of personal exposure				
3. Use approved control agents and equipment on a release involving hazardous materials/WMD				
4. Use remote control valves and emergency shutoff devices on containers at fixed facilities				
5. Perform product control techniques				
6. Protect exposures and personnel				
7. Follow safety procedures				
8. Avoid or minimize hazards				
9. Product is controlled				
10. Decontamination is completed				
11. Operations are reported and documented				
<b>Candidate must successfully perform 8/11 steps including ALL CRITICAL POINTS</b>	Score: __/11		Score: __/11	

**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)

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<b>Candidate Print Name &amp; Signature:</b>	<b>Candidate: Print Name or Candidate #</b>
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# Mass Decontamination

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 6.3.1

Hazardous Materials Operations

## Skill Sheet HMO - 10

The candidate will perform mass decontamination for ambulatory and nonambulatory victims at a hazardous materials/WMD incident, given a hazardous materials/WMD incident that requires mass decontamination; an assignment in an IAP; scope of the problem; policies and procedures; approved tools, equipment, and PPE; and access to a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures.

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

Criteria/Performance Steps:			Test	
Safely performs the following steps:			P	F
1. Select and use PPE				
2. Select a mass decontamination method to minimize the hazard				
3. Set up and implement mass decontamination operations in a safe location				
4. Evaluate the effectiveness of the mass decontamination method				
5. Operations are reported and documented				
6. Protect exposures and personnel				
7. Follow safety procedures CRITICAL POINT				
8. Avoid or minimize hazards				
9. Personnel, tools, and equipment are decontaminated				
<b>Candidate must successfully perform 7/9 steps including ALL CRITICAL POINTS</b>			Score: __/9	
<b>Evaluator Notes</b>				
<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>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 Testing Policies 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				



# Technical Decontamination

NFPA 1072, *Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition; 6.4.1

Hazardous Materials Operations

## Skill Sheet HMO - 11

The candidate will perform 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 that requires technical decontamination; an assignment in an IAP; scope of the problem; policies and procedures for technical decontamination; approved tools, equipment, and PPE; and access to a hazardous materials technician, an allied professional, an emergency response plan, or standard operating procedures,

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

Criteria/Performance Steps:		Test	
Safely performs the following steps:		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. Evaluate the effectiveness of the mass decontamination method			
5. Operations are reported and documented			
6. Protect exposures and personnel			
7. Follow safety procedures CRITICAL POINT			
8. Avoid or minimize hazards			
9. Personnel, tools, and equipment are decontaminated			
<b>Candidate must successfully perform 7/9 steps including ALL CRITICAL POINTS</b>		Score: __/9	
<b>Evaluator Notes</b>			
<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>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 Testing Policies 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			