

HAZARDOUS MATERIALS TECHNICIAN

SKILL SHEET PACKAGE

Based on *NFPA 472: Standard for Competence of Responders to
Hazardous Materials/Weapons of Mass Destruction Incidents*,
2008 Edition

ALABAMA FIRE COLLEGE

DECEMBER 2009

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SKILL SHEET PACKAGE INSTRUCTIONS

Host Department _____
Course _____
Lead Instructor _____
Date of class _____

- Please check with the course monitor to ensure you have the correct progress record and skill sheets for the course being taught.
- All skill sheets must be filled out for each student and signed.
- All completed skill sheets must be returned to the proctor on the day of the test.
- Certifications will not be granted until these forms are on file at the Alabama Fire College.
- Please return this completed form to the AFC along with your skill sheets.

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Hazardous Materials Technician Skill Sheet Package 2008 Edition

<u>Skill</u>	<u>Primary Task</u>	<u>JPR(s) Covered</u>
1	Function within a Hazardous Area	7.1.2.2; 7.2.2; 7.3.5; 7.4.1; 7.6.1; 7.6.3
2	Choose Correct PPE Ensemble for a Given Material and Don, Doff and Inspect PPE	7.4.2(1)(2)(3)(4); 7.3.3; 7.3.3.3; 7.3.3.4; 7.3.3.4.3; 7.3.3.4.5
3	Containing Leaks and Drum Overpacking	7.4.3(3)(4)
4	Contain Leak on 100 or 150 Pound Chlorine Cylinder	7.4.3(1)(2)
5	Contain Leak on a Ton Chlorine Container	7.4.3 (1)(2)
6	Contain Leak on Non-Pressure Tank Truck	7.4.3(8)(10)
7	Ground Cargo Tank & Install Dome Cover Clamp	7.4.3(7)(8)(10a)
8	Perform a Decontamination on Entry Team Member & Non-Ambulatory Victim	7.3.4; 7.4.5
9	Select Appropriate Monitoring Equipment	7.2.1.3(1)(2)(3)(4)(5)
10	Field Maintenance of Monitoring Equipment	7.2.1.3.6
11	Demonstrate Methods for Collecting Samples of Gas, Liquid and Solid	7.2.1.5

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Hazardous Materials Technician Performance Evaluation Grade Sheet

Name: _____ Fire Department: _____

Address: _____

Training Location: _____ Date Started: _____

This Performance Evaluation Check-Off Sheet is to be used in conjunction with the Alabama Fire College Hazardous Materials Technician Skill Sheets. These skills meet all the requirements of NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, 2008 edition. Students must receive a passing grade on all skills in order to apply for Hazardous Materials Technician certification. Please submit a Performance Evaluation Grade Sheet for each student in the class to the test proctor.

Skill	Primary Task	Participated/ Observed	Pass/Fail	Student Initial	Evaluator Initial	Date
1	Function within a Hazardous Area					
2	Choose Correct PPE Ensemble for a Given Material and Don, Doff and Inspect PPE					
3	Containing Leaks and Drum Overpacking					
4	Contain Leak on 100 or 150 Pound Chlorine Cylinder					
5	Contain Leak on a Ton Chlorine Container					
6	Contain Leak on Non-Pressure Tank Truck					
7	Ground Cargo Tank & Install Dome Cover Clamp					
8	Perform a Decon on Entry Team Member & Non-Ambulatory Victim					
9	Select Appropriate Monitoring Equipment					
10	Field Maintenance of Monitoring Equipment					
11	Demonstrate Methods for Collecting Samples of Gas, Liquid and Solid					



Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 1 **JPR(s) 7.1.2.2; 7.2.2; 7.3.5;**
7.4.1; 7.6.1; 7.6.3 **Time Allotted: 1 hour**

Primary Task: FUNCTION WITHIN A HAZARDOUS AREA

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

The technician, given a hazardous materials scenario and three printed technical reference materials, shall:

1. Collect and interpret hazard and response information.
2. Develop an incident site safety control plan.
3. Based on the scenario and technical research of the reference materials, the technician shall identify the signs and symptoms of exposure and identify target organs affected by the chemical exposure.
4. Complete a product data sheet.
5. Debriefing.
6. The trainee will not be allowed to review the performance steps at the time of testing.
7. Prevent or prohibit any unsafe acts.
8. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. You will be provided with a scenario that is site specific. (Below is an example and can not be used as part of the evaluation.)
2. Using the forms and technical reference materials provided, you will accomplish the listed objectives.
3. You will be given one hour to complete this skill.
4. The skill will end when you state or indicate to the monitor that you have completed all the identified steps.
5. Notify the monitor/evaluator at any time that you have a safety concern.

PREPARATION & EQUIPMENT

1. Local Emergency Response Plan (provided with skill sheet)
2. Scenario
3. Hazardous materials reference library consisting of at least the following reference materials:
 - a. AAR, Emergency Action Guides
 - b. CHRIS Manual
 - c. Hawley's Condensed Chemical Dictionary
 - d. Farm Chemical Handbook
4. Product Data Sheet

EXAMPLE:

An employee was moving a 55 gallon drum of Sulfuric Acid in the back of the warehouse. The drum fell off the dolly striking the floor causing a small leak at the large closure. The employee, using a bung wrench, attempted to tighten the closure but the vapors began to burn their eyes and nose. They immediately evacuated the building, notifying the other employees on the way out. The fire department was notified after leaving the building.

REFERENCE SOURCE:

NFPA 472, 2008 edition
FPP's



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Hazardous Materials Technician Skill Sheet

Skill No. 1 **JPR(s) 7.1.2.2; 7.2.2; 7.3.5; 7.4.1; 7.6.1; 7.6.3**

Primary Task: FUNCTION WITHIN A HAZARDOUS AREA

Performance steps	Test		Retest	
	Pass	Fail	Pass	Fail
Safely performs the following steps.				
1. Successfully completes all elements within one hour				
2. Uses a minimum of three reference sources				
3. Identifies signs and symptoms of exposure				
4. Identifies target organs affected				
Performs assigned duties:				
5. Backup				
6. Decontamination				
7. Entry				
8. Haz Mat branch management				
9. Haz Mat branch safety				
10. Information/research				
11. Reconnaissance				
12. Resources				
Includes in the site safety plan/action plan, as a minimum, the following:				
13. Maximum exposure limits				
14. Identifies hazards or conditions present				
15. Level of PPE needed				
16. Hazardous substance safe handling procedures				
17. Identifies the need for a site map				
18. Use of the "buddy system"				
19. Backup personnel				
20. Medical support				
21. Safety Officer				
22. Decontamination procedures				
23. Hazard monitoring				
24. Control zones				
25. Performs documentation				
26. Participates in debriefing				

Evaluator/Candidate comments:

Evaluator Signature:	Date:	Overall Skill Sheet Score	
		Pass ___	Fail ___
Re-Test Evaluator Signature:	Date:	Overall Skill Sheet Re-Test Score	
		Pass ___	Fail ___
Candidate Signature:	Date:	Candidate #	



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Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 2

**JPR(s) 7.4.2(1); 7.4.2(2); 7.4.2(3); 7.4.2(4), 7.3.3;
7.3.3.3; 7.3.3.4; 7.3.3.4.3; 7.3.3.4.5**

**Primary Task: CHOOSE CORRECT PPE ENSEMBLE FOR A GIVEN MATERIAL AND
DON, DOFF, AND INSPECT PPE**

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

1. Given a hazardous material and an ERG, the candidate will choose the PPE ensemble needed to handle a leak/spill of the material.
2. The candidate will explain his/her choice of the PPE
3. The technician shall demonstrate (with the help of an assistant) the ability to don, work in, and doff the chosen PPE.
2. The candidate must also record the use, repair, and test PPE in accordance with manufacturer's recommendations.
3. The trainee will not be allowed to review the performance steps at the time of testing.
4. Prevent or prohibit any unsafe acts.
5. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. You will be given a hazardous material, and ERG and a selection of PPE.
2. You must use the ERG to choose a PPE ensemble, and explain why the particular ensemble was chosen.
3. You must then (with the help of an assistant correctly don and doff the chosen ensemble, explaining the steps of the operation as you go.
4. The skill will end when you state or indicate to the monitor that you have completed all of the steps of operation.
5. Notify the monitor/evaluator at any time that you have a safety concern.

PREPARATION & EQUIPMENT

1. Self-contained breathing apparatus with cylinder (cylinder should be of sufficient capacity to ensure adequate air supply for travel, work, and decontamination).
2. PPE ensembles and related equipment
3. Suitable place for technician to sit (i.e. small stool, folding chair with no back, or step ladder 18"-24")
4. *Emergency Response Guidebook (ERG)*

REFERENCE SOURCE:

NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, 2008 edition
FPP's *Hazardous Materials Managing the Incident*



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Hazardous Materials Technician Skill Sheet

Skill No. 2 JPR(s) 7.4.2(1); 7.4.2(2); 7.4.2(3); 7.4.2(4), 7.3.3; 7.3.3.3; 7.3.3.4; 7.3.3.4.3; 7.3.3.4.5
Primary Task: CHOOSE CORRECT PPE ENSEMBLE FOR A GIVEN MATERIAL AND DON, DOFF, AND INSPECT PPE

Table with 5 columns: Performance steps, Test (Pass/Fail), and Retest (Pass/Fail). Rows list 17 performance steps from looking up PPE ensemble to storing PPE appropriately.

Evaluator/Candidate comments:
Evaluator Signature: Date: Overall Skill Sheet Score
Pass ___ Fail ___
Re-Test Evaluator Signature: Date: Overall Skill Sheet Re-Test Score
Pass ___ Fail ___
Candidate Signature: Date: Candidate #



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Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 3 JPR(s) 7.4.3(3); 7.4.3(4)

Primary Task: CONTAINING LEAKS AND DRUM OVERPACKING

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

1. The technician, working as a team and working in Level A or B chemical protective clothing (CPC), shall demonstrate the ability to contain four common types of leaks associated with 55 gallon drums and demonstrate 3 methods of drum overpacking.
2. The trainee will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. The technicians will be presented with four 55 gallon leaking drums, one with a nail puncture, one with a forklift puncture, one with a chime leak, and one with a leaking closure (bung or top).
2. You will choose the appropriate tools and equipment, from the equipment available, and contain each of the leaks.
3. The technicians shall overpack three of the drums demonstrating three different methods of overpacking.
4. You will be given 30 minutes to complete this skill (after donning Level A or B CPC).
5. The skill will end when you state or indicate to the monitor that you have completed all the identified steps.
6. Notify the monitor/evaluator at any time that you have a safety concern.

PREPARATION & EQUIPMENT

1. Four 55 gallon drums: one with a nail puncture, one with a forklift puncture, one with a chime leak, and one with a leaking closure (bung).
2. Bung wrench
3. Plug and patching kit
4. Three overpack drums
5. Level A or Level B CPC
6. SCBA

REFERENCE SOURCE:

NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, 2008 edition
FPP's *Hazardous Materials Managing the Incident*



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Hazardous Materials Technician Skill Sheet

Skill No. 3 JPR(s) 7.4.3(3); 7.4.3(4)

Primary Task: CONTAINING LEAKS AND DRUM OVERPACKING

Performance steps	Test		Retest	
	Pass	Fail	Pass	Fail
Safely performs the following steps.				
1. Successfully completes all steps within 30 minutes				
2. Contains a 55 gallon drum bung leak with drum laying on its side				
a. Tightens leaking bung to contain leak; or				
b. Contains leak by placing rubber/wooden plug in closure; and				
c. Uprights drum, "after controlling leak"				
3. Contains a 55 gallon drum with nail puncture leak				
a. Contains leak by inserting plug				
b. Applies patch				
4. Contains 55 gallon drum chime leak				
a. Contains leak by applying putty, lead wool, or other appropriate method				
b. Positions drum with leak in vapor space				
5. Contains a 55 gallon drum forklift puncture leak				
a. Contains leak using appropriate tools and materials provided				
6. Overpacks a leaking 55 gallon drum				
a. Slide-in method				
b. Rolling slide-in method (V-method)				
c. Slip over				

Evaluator/Candidate comments:

Evaluator Signature:	Date:	Overall Skill Sheet Score	
		Pass ___	Fail ___
Re-Test Evaluator Signature:	Date:	Overall Skill Sheet Re-Test Score	
		Pass ___	Fail ___
Candidate Signature:	Date:	Candidate #	



Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 4 JPR(s) 7.4.3(1); 7.4.3(2)

Primary Task: CONTAIN LEAK ON 100 OR 150 POUND CHLORINE CYLINDER

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

1. The technicians, wearing Level A chemical protective clothing (CPC) and operating as a two person team, shall demonstrate the method to contain a leak on a 100 or 150 pound chlorine cylinder.
2. The trainee will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. You will be provided with a 100 or 150 pound "chlorine training cylinder" and three chlorine kits that contain the necessary tools and equipment to contain a leak.
2. The kits will be placed approximately ten feet from the "chlorine training cylinder".
3. One of the listed simulated leaks will be chosen to conduct the evaluation.
4. Your team must choose the proper chlorine kit for the evaluation and effectively stop the leak you are presented.
5. You must indicate to the monitor when the leak has been controlled.
4. You will be given 20 minutes to complete this skill (after donning Level A CPC).
5. The skill will end when you state or indicate to the monitor that you have completed all the identified steps.
6. Notify the monitor/evaluator at any time that you have a safety concern.

TYPES OF LEAKS

Valve gland	Valve seat	Valve blow-out
Ruptured fusible plug	Valve assembly blow-out	Side wall of cylinder
Open valve	Loose or missing plug	Fusible plug thread leak

PREPARATION & EQUIPMENT

1. 1 - 100 or 150 pound "chlorine training cylinder" that has been modified with piping and valves.
An air supply must simulate all the required leaks of this evaluation.
2. 1 - Chlorine A Kit
3. 1 - Chlorine B Kit
4. 1 - Chlorine C Kit
5. Level A CPC

REFERENCE SOURCE:

NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, 2008 edition
FPP's Hazardous Materials Managing the Incident



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Hazardous Materials Technician Skill Sheet

Skill No. 4 JPR(s) 7.4.3(1); 7.4.3(2)
Primary Task: CONTAIN LEAK ON 100 OR 150 POUND CHLORINE CYLINDER

Table with 5 columns: Performance steps, Test (Pass/Fail), Retest (Pass/Fail). Rows include: Safely performs the following steps, Type of leak chosen, 1. Successfully contains leak within 20 minutes, 2. Correct kit chosen.

Evaluator/Candidate comments:
Evaluator Signature: Date: Overall Skill Sheet Score (Pass/Fail)
Re-Test Evaluator Signature: Date: Overall Skill Sheet Re-Test Score (Pass/Fail)
Candidate Signature: Date: Candidate #



Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 5 **JPR(s) 7.4.3(1); 7.4.3(2)**

Primary Task: CONTAIN LEAK ON A TON CHLORINE CONTAINER

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

1. The technicians, wearing Level A chemical protective clothing (CPC) and operating as a two person team, shall demonstrate the method to contain a leak on a ton chlorine container.
2. The trainee will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. You will be provided with a ton “chlorine training cylinder” and three chlorine kits that contain the necessary tools and equipment to contain a leak.
2. The kits will be placed approximately ten feet from the ton “chlorine training cylinder”.
3. One of the listed simulated leaks will be chosen to conduct the evaluation.
4. Your team must choose the proper chlorine kit for the evaluation and effectively stop the leak you are presented.
5. You must indicate to the monitor when the leak has been controlled.
4. You will be given 20 minutes to complete this skill (after donning Level A CPC).
5. The skill will end when you state or indicate to the monitor that you have completed all the identified steps.
6. Notify the monitor/evaluator at any time that you have a safety concern.

TYPES OF LEAKS

- | | | |
|-----------------------|-------------------------|--------------------------|
| Valve gland | Valve seat | Valve blow-out |
| Ruptured fusible plug | Valve assembly blow-out | Side wall of cylinder |
| Open valve | Loose or missing plug | Fusible plug thread leak |

PREPARATION & EQUIPMENT

1. 1 - Ton “chlorine training cylinder” that has been modified with piping and valves.
An air supply must simulate all the required leaks of this evaluation.
2. 1 - Chlorine A Kit
3. 1 - Chlorine B Kit
4. 1 - Chlorine C Kit
5. Level A CPC

REFERENCE SOURCE:

NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, 2008 edition
FPP’s Hazardous Materials Managing the Incident



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Hazardous Materials Technician Skill Sheet

Skill No. 5 JPR(s) 7.4.3(1); 7.4.3(2)
Primary Task: CONTAIN LEAK ON A TON CHLORINE CONTAINER

Table with 5 columns: Performance steps, Test (Pass/Fail), Retest (Pass/Fail). Rows include: Safely performs the following steps., Type of leak chosen, 1. Successfully contains leak within 20 minutes, 2. Correct kit chosen.

Evaluator/Candidate comments:
Evaluator Signature: Date: Overall Skill Sheet Score (Pass/Fail)
Re-Test Evaluator Signature: Date: Overall Skill Sheet Re-Test Score (Pass/Fail)
Candidate Signature: Date: Candidate #



Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 6 **JPR(s) 7.4.3(8); 7.4.3(10)**

Primary Task: CONTAIN LEAK ON NON-PRESSURE TANK TRUCK
306/406; 307/407; 312/412

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

1. The technicians, wearing Level A chemical protective clothing (CPC) and operating as a two person team, shall demonstrate the method to contain a leak on a non-pressure tank truck.
2. The trainee will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. You will be provided with a tank vehicle appropriate for the scenario, clamps, plugs and patches with tool kits that contain the necessary tools and equipment to contain a leak.
2. The kits will be placed approximately ten feet from the fittings or the tank truck.
3. One of the listed simulated leaks will be chosen to conduct the evaluation.
4. Your team must choose the proper kit for the evaluation and effectively stop the leak you are presented.
5. You must indicate to the monitor when the leak has been controlled.
4. You will be given 30 minutes to complete this skill (after donning Level A CPC).
5. The skill will end when you state or indicate to the monitor that you have completed all the identified steps.
6. Notify the monitor/evaluator at any time that you have a safety concern.

TYPES OF LEAKS

Dome cover leak	Puncture
Irregular-shaped hole	Split or tear

PREPARATION & EQUIPMENT

1. Dome cover clamp(s)
2. Plugging kit
3. Patching kit
4. Level A CPC

REFERENCE SOURCE:

NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, 2008 edition
FPP's *Hazardous Materials Managing the Incident*



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Hazardous Materials Technician Skill Sheet

Skill No. 6 JPR(s) 7.4.3(8); 7.4.3(10)

Primary Task: CONTAIN LEAK ON NON-PRESSURE TANK TRUCK

Table with 5 columns: Performance steps, Test (Pass/Fail), Retest (Pass/Fail). Rows include: Safely performs the following steps., Type of leak chosen:, 1. Successfully contains leak within 30 minutes, 2. Correct kit chosen

Evaluator/Candidate comments:

Table for signatures and scores. Columns: Evaluator Signature, Date, Overall Skill Sheet Score (Pass/Fail), Re-Test Evaluator Signature, Date, Overall Skill Sheet Re-Test Score (Pass/Fail), Candidate Signature, Date, Candidate #



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Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 7 JPR(s) 7.4.3(7); 7.4.3(8); 7.4.3(10a)

Primary Task: GROUND CARGO TANK & INSTALL DOME COVER CLAMP

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

1. The technicians, wearing structural fire fighting personal protective equipment and SCBA and operating as a two person team, shall demonstrate the ability to properly ground a MC 306/DOT 406 cargo tank and install a dome cover clamp.
2. The hazardous materials technician trainee shall accomplish the skill wearing "FULL PROTECTIVE CLOTHING FOR STRUCTURAL FIRE FIGHTERS" as required by the Alabama Fire College to include helmet, coat, trousers, boots, and SCBA. Fire fighter trainee will not don face piece or hood.
3. The trainee will not be allowed to review the performance steps at the time of testing.
4. Prevent or prohibit any unsafe acts.
5. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. You will be presented with a MC 306/DOT 406 cargo tank which is leaking a product from one of the dome covers.
2. You will gather necessary equipment for grounding the cargo tank and controlling the leak coming from the dome cover.
3. The required equipment will be placed approximately 100 feet from the cargo tank.
4. You will properly install the dome clamp and ground the cargo tank in anticipation of product transfer.
5. The skill will end when you state or indicate to the monitor that you have completed all the identified steps.
6. Notify the monitor/evaluator at any time that you have a safety concern.

PREPARATION & EQUIPMENT

1. One of the following:
 - a. 1 - MC 306/DOT 406 cargo tank; or
 - b. 1 - Cargo tank dome cover training simulator
2. 1 - Dome cover clamp
3. 1 - LEL monitor
4. 1 - Complete set of grounding equipment
 - a. Ground rod (5' min.)
 - b. Ground clamps (aircraft grounding clamps and three-pin contact)
 - c. Grounding cable (1/8" stainless steel or 8 AWG min.)
 - d. Non-sparking hammer

REFERENCE SOURCE:

NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, 2008 edition
FPP's Hazardous Materials Managing the Incident



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Hazardous Materials Technician Skill Sheet

Skill No. 7 JPR(s) 7.4.3(7); 7.4.3(8); 7.4.3(10a)

Primary Task: GROUND CARGO TANK & INSTALL DOME COVER CLAMP

Table with 5 columns: Performance steps, Test (Pass/Fail), and Retest (Pass/Fail). Rows include steps like 'Approaches cargo tank or simulator in a safe manner' and 'Properly applies dome cover clamp'.

Evaluator/Candidate comments:

Signature and score table with columns for Evaluator Signature, Date, Overall Skill Sheet Score, Re-Test Evaluator Signature, Date, Overall Skill Sheet Re-Test Score, Candidate Signature, Date, and Candidate #.



Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 8 **JPR(s) 7.3.4; 7.4.5**

Primary Task: PERFORM A DECONTAMINATION ON ENTRY TEAM MEMBER & NON-AMBULATORY VICTIM

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

1. The technicians, operating as a member of a two person team at a simulated hazardous materials incident, shall demonstrate how to perform a decontamination.
2. The trainee will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. Using a contamination reduction corridor, wearing Level B hooded chemical protective clothing (CPC) and a self-contained breathing apparatus (SCBA), you shall demonstrate the procedures for decontamination for the simulated hazardous materials incident.
2. You will be provided one technician in a contaminated Level A CPC.
3. It will be your skill to decontaminate effectively.
4. First you will decontaminate the Level A technician, then each other.
5. You will be given 30 minutes to complete this skill.
6. The skill will end when you state or indicate to the monitor that you have completed all the identified steps.
7. Notify the monitor/evaluator at any time that you have a safety concern.

PREPARATION & EQUIPMENT

1. Contamination reduction corridor
2. Two Level B CPC complete with boots and gloves
3. Three SCBA
4. One technician in Level A CPC that is contaminated (contamination may be accomplished by applying dry chemical from a fire extinguisher)

REFERENCE SOURCE:

NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, 2008 edition
FPP's *Hazardous Materials Managing the Incident*



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Hazardous Materials Technician Skill Sheet

Skill No. 8 JPR(s) 7.3.4; 7.4.5

Primary Task: PERFORM A DECONTAMINATION ON ENTRY TEAM MEMBER & NON-AMBULATORY VICTIM

Performance steps	Test		Retest	
	Pass	Fail	Pass	Fail
Safely performs the following steps.				
1. Completes both decon procedures within 30 minutes				
Decontaminates Technician				
2. Instructs technician to put tools in tool drop container				
3. Performs gross decontamination and wash at first decon pool to remove as much contamination as possible				
4. Performs rinse at second decon pool				
5. Assist technician with CPC removal in desuited area				
6. Places contaminated CPC in proper drum				
7. Removes SCBA				
8. Instructs technician to move to medical evaluation area				
Decontaminates Non-Ambulatory victim				
9. Decon team ensures all contaminated tools and equipment are placed in containment drums				
10. Decon team ensures that contaminated run-off is contained in pools or decontamination area				
11. Performs decontamination on a non-ambulatory victim				
12. Avoids crossing contamination				

Evaluator/Candidate comments:

Evaluator Signature:	Date:	Overall Skill Sheet Score	
		Pass <u> </u>	Fail <u> </u>
Re-Test Evaluator Signature:	Date:	Overall Skill Sheet Re-Test Score	
		Pass <u> </u>	Fail <u> </u>
Candidate Signature:	Date:	Candidate #	



Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 9 **JPR(s) 7.2.1.3(1)(2)(3)(4)(5)**

Primary Task: SELECT APPROPRIATE MONITORING EQUIPMENT

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

1. Given examples of various hazardous materials, the technician shall select the appropriate monitoring equipment to identify and quantify the results for each material.
2. The trainee will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. You will be given a sample of a liquid, a solid, and a gas.
2. You will select the appropriate type of monitoring equipment to identify or classify by hazard using the quantified results (Example: If a sample is a liquid and has a pH of 2, it would be an acid. If it also had a LEL of 12%, it would also be a flammable liquid.)
3. The skill will end when you state or indicate to the monitor that you have completed all the identified steps.
4. Notify the monitor/evaluator at any time that you have a safety concern.

PREPARATION & EQUIPMENT

1. Carbon monoxide meter*
2. Oxygen meter*
3. Combustible gas indicator*
4. Colorimetric tubes and pump
5. pH paper or electronic pH meter
6. Radiation detection instruments
7. Reagents
8. Test strips
9. Samples of hazardous materials (liquids, gasses, and solids)

*These can be single gas monitors or multi-gas monitors

REFERENCE SOURCE:

NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, 2008 edition
FPP's *Hazardous Materials Managing the Incident*



ALABAMA FIRE COLLEGE



Hazardous Materials Technician Skill Sheet

Skill No. 9 JPR(s) 7.2.1.3(1)(2)(3)(4)(5)

Primary Task: SELECT APPROPRIATE MONITORING EQUIPMENT

Table with 5 columns: Performance steps, Test (Pass/Fail), and Retest (Pass/Fail). Rows include steps for Liquid, Solid, and Gas samples, including instrument selection and classification.

Evaluator/Candidate comments:

Signature and score table with columns for Evaluator Signature, Date, Overall Skill Sheet Score (Pass/Fail), Re-Test Evaluator Signature, Date, Overall Skill Sheet Re-Test Score (Pass/Fail), Candidate Signature, Date, and Candidate #.



ALABAMA FIRE COLLEGE



Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 10 **JPR(s) 7.2.1.3.6**

Primary Task: FIELD MAINTENANCE OF MONITORING EQUIPMENT

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

1. Given examples of various monitoring equipment, the technician shall demonstrate field maintenance/testing procedures for each of the types listed.
2. The trainee will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. You will be given three types of instruments.
2. You will demonstrate the procedures for calibrating the instruments or verifying their calibration.
3. The skill will end when you state or indicate to the monitor that you have completed all the identified steps.
4. Notify the monitor/evaluator at any time that you have a safety concern.

PREPARATION & EQUIPMENT

1. Carbon monoxide monitor*
2. Combustible gas indicator*
3. Oxygen monitor*
4. Equipment to calibrate or verify calibration

*These can be single gas monitors or multi-gas monitors

REFERENCE SOURCE:

NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, 2008 edition
FPP's *Hazardous Materials Managing the Incident*



ALABAMA FIRE COLLEGE



Hazardous Materials Technician Skill Sheet

Skill No. 10 JPR(s) 7.2.1.3.6
Primary Task: FIELD MAINTENANCE OF MONITORING EQUIPMENT

Table with 5 columns: Performance steps, Test (Pass/Fail), Retest (Pass/Fail). Rows include: Safely performs the following steps, 1. Carbon monoxide monitor, 2. Combustible gas indicator, 3. Oxygen monitor.

Evaluator/Candidate comments:

Signature and Date fields for Evaluator, Re-Test Evaluator, and Candidate. Includes Overall Skill Sheet Score and Candidate # fields.



ALABAMA FIRE COLLEGE



Hazardous Materials Technician Performance Evaluation Instruction Sheet

Skill No. 11 JPR(s) 7.2.1.5

Primary Task: DEMONSTRATE METHODS FOR COLLECTING SAMPLES OF GAS, LIQUID AND SOLID

INSTRUCTIONS TO THE MONITOR/EVALUATOR - SAFETY IS PARAMOUNT!

1. Given examples of various sampling equipment, the technician shall identify procedures and demonstrate the methods for collecting samples.
2. The trainee will not be allowed to review the performance steps at the time of testing.
3. Prevent or prohibit any unsafe acts.
4. Remember you are an evaluator, not an instructor.

INSTRUCTIONS TO THE CANDIDATE

1. You will be shown various sampling equipment.
2. You will demonstrate the procedures for collecting the specified sample.
3. You will verbalize the purpose of the equipment and its operation.
4. Notify the monitor/evaluator at any time that you have a safety concern.

PREPARATION & EQUIPMENT

Various sampling equipment

REFERENCE SOURCE:

NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, 2008 edition
FPP's *Hazardous Materials Managing the Incident*



ALABAMA FIRE COLLEGE



Hazardous Materials Technician Skill Sheet

Skill No. 11 **JPR(s) 7.2.1.5**

Primary Task: DEMONSTRATE METHODS FOR COLLECTING SAMPLES OF GAS, LIQUID AND SOLID

Performance steps	Test		Retest	
	Pass	Fail	Pass	Fail
Safely performs the following steps.				
1. Identifies monitoring capabilities of the instrument				
2. Identifies inspection procedures				
3. Turns monitor on				
4. Identifies any problems during warm up				
5. Allows monitor sufficient time to warm up				
6. Begins sensing				
7. Identifies calibration gas for particular instrument (pentane/methane/hexane,etc.)				
8. Turns monitor on				
9. Identifies any problems during warmup				
10. Allows monitor sufficient time to warm up				
11. Sets monitor to "Calibration Mode"				
12. Applies correct calibration gas				
13. Removes cal gas when monitor is calibrated				
14. Begins sensing or turns monitor off				
Identifies limitations				
15. High humidity				
16. Aspiration of liquid into sensors				
17. Insufficient level of O2				
18. Extremely high or low temperatures				
19. Corrosive atmospheres				
20. Electronic interference				
21. Sensor poisoning by heavy metals, silicones, silicates, and some sulfur compounds				
22. Interference gases				

Evaluator/Candidate comments:

Evaluator Signature:	Date:	Overall Skill Sheet Score	
		Pass ___	Fail ___
Re-Test Evaluator Signature:	Date:	Overall Skill Sheet Re-Test Score	
		Pass ___	Fail ___