| Colorado Division of Fire Prevention & Control<br>Hazardous Materials Awareness JPR's (NFPA 472 2013 Edition) | | |
|---|---|---|
| **JPR Number** | **Task** | **Initial Certification JPR Requirement: No JPR's at this time**<br><br>**Renewal JPR Requirement: 100% of All JPRs (including all subsections)** |
| 1 | Hazard Class and Divisions | Mandatory |
| 2 | ERG Exercise | Mandatory |
| 3 | Written Documantation | Random |
| 4 | NFPA 704 | Random |
| 5 | Criminal / Terrorism / WMD | Random |

| Colorado Division of Fire Prevention & Control<br>Hazardous Materials Operations JPR's (NFPA 472 2013 Edition) | | |
|---|---|---|
| **JPR Number** | **Task** | **Initial Certification JPR Requirement:** 2 Mandatory 3 Random<br><br>**Renewal JPR Requirement: 100% of All JPRs (including all subsections)** |
| 1 | Emergency Decontamination | Mandatory |
| 2 | MSDS | Mandatory |
| 3 | Scenario - Fire<br>(Worksheet Attached) | Random |
| 4 | Scenario - Spill<br>(Worksheet Attached) | Random |
| 5 | Pesticide Label<br>(Worksheet Attached) | Random |
| 6 | Donning PPE | Random |
| 7 | Foam | Random |
| 8 | Defensive Control Actions | Random |

# Hazardous Materials Operations
# JPR: HZMT-OPS-1

**Candidate:** _____

| | |
|---|---|
| **STANDARD: NFPA 472, 2013 Edition**<br>**Section(s): 5.1.2.2 (3); 5.4.1 (4); 5.4.2; 6.2.4.1**<br>**Implementing the Planned Response** | **Task:** Demonstrate the ability to perform emergency decontamination |
| **PERFORMANCE OUTCOME:** | The candidate will as a member of a team successfully demonstrate the ability to perform emergency decontamination.<br>**Safety: A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.** |
| **EQUIPMENT REQUIRED:** Personal protective equipment, self-contained breathing apparatus (SCBA), water supply, hoses, and product name. | |
| **CONDITIONS:** Whenever possible, integrate the evaluation of this JPR within a consolidated hazardous materials/WMD incident scenario. This will allow multiple JPR's to be evaluated effectively in conjunction with other hazardous materials/WMD incident scenario activities. | |

| No. | Task Steps | ✓ |
|---|---|---|
| 1 | Identify the contaminated person. | |
| 2 | Remove contaminated person from threatened area. | |
| 3 | Immediately begin flushing with copious amounts of water. | |
| 4 | Avoid cross contamination | |
| 5 | Remove victim to clean area. | |
| 6 | Inform medical personnel of contaminant. | |
| 7 | Secure Scene / Maintain evidence. | |

**Evaluator (Print & Sign)** _____ **Date:** _____

# Hazardous Materials Operations
# JPR: HZMT-OPS-2

**Candidate:** _____

| | |
|---|---|
| **STANDARD: NFPA 472, 2013 Edition**<br><br>**Section(s): 5.2.2 (3)(a)-(j)**<br><br>**Analyzing the Incident** | **Task:** Given an Material Safety Data Sheet (MSDS) for a specified material, identify the following hazard and response information:<br>(a) Physical and chemical characteristics<br>(b) Physical hazards of the material<br>(c) Health hazards of the material<br>(d) Signs and symptoms of exposure<br>(e) Routes of entry<br>(f) Personal exposure limits<br>(g) Manufacturers contact<br>(h) Precautions for safe handling (including hygiene practices, protective measures, and procedures for cleanup of spills and leaks)<br>(i) Applicable control measures, including personal protective equipment<br>(j) Emergency and first-aid procedures |
| **PERFORMANCE OUTCOME:** | The candidate will complete this task within 30 minutes with a minimum of 18 of 23 items answered correctly.<br>**Safety: A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.** |
| **EQUIPMENT REQUIRED:** MATERIAL SAFETY DATA SHEET (MSDS) AS PROVIDED BY THE AUTHORITY HAVING JURISDICTION (AHJ) | |
| **CONDITIONS:** Whenever possible, integrate the evaluation of this JPR within a consolidated hazardous materials/WMD incident scenario. This will allow multiple JPR's to be evaluated effectively in conjunction with other hazardous materials/WMD incident scenario activities. | |

| No. | Task Steps | ✓ |
|---|---|---|
| 1 | Physical and chemical characteristics | |
| | a. Boiling point: | |
| | b. Specific gravity and/or vapor density: | |
| | c. Appearance/physical state: | |
| | d. Odor: | |
| | e. Flash point: | |
| | f. Vapor pressure: | |
| | g. Flammable range: | |
| | h. Water solubility: | |
| 2 | Physical hazards of the material: | |
| 3 | Health hazards of the material: | |
| 4 | Signs and symptoms of exposure: | |

| No. | Task Steps | ✓ |
|---|---|---|
| 5 | Routes of entry: | |
| 6 | Personal exposure limits: | |
| | a. PEL/PEL-C | |
| | b. TLV/TWA | |
| | c. STEL | |
| | d. IDLH | |
| | e. LD50/LC50 | |
| 7 | Manufacturer contact: | |
| 8 | Precautions for safe handling: | |
| | a. Hygiene practices: | |
| | b. Protective measures: | |
| 9 | Applicable control measures: | |
| 10 | Personal Protective Equipment: | |
| 11 | Emergency and first-aid procedures: | |

**Evaluator** **(Print & Sign)** **Date:**

# Hazardous Materials Operations
# JPR: HZMT-OPS-2 Worksheet

**Candidate:** _____

Given a Material Safety Data Sheet (MSDS), identify the following hazard and response information.

The candidate will complete this task within 30 minutes with a minimum of 18 of 23 items answered correctly.

**1. Physical and chemical characteristics:**

a. Boiling point _____
b. Specific Gravity and/or Vapor Density _____
c. Appearance / Physical State _____
d. Odor _____
e. Flash point _____
f. Vapor pressure _____
g. Flammable range _____
h. Water Solubility _____

**2. Physical hazards of the material:**

_____
_____
_____

**3. Health hazards of the material:**

_____
_____
_____

**4. Signs and symptoms of exposure:**

_____
_____
_____

**5. Routes of entry:**

_____
_____
_____
_____

**6. Permissible exposure limits:**

a. PEL PEL-C _____

b. TLV / TWA _____

c. STEL _____

d. IDLH _____

e. LD50 / LC50 _____

**7. Manufacturer contact:**

_____

_____

**8. Precautions for safe handling:**

**a. Hygiene Practices:**

_____

_____

**b. Protective measures:**

_____

_____

**9. Applicable Control Measures:**

_____

_____

**10. Personal Protective Equipment:**

_____

_____

**11. Emergency and First-Aid Procedures:**

_____

_____

**Evaluator (Print & Sign)** _____ **Date:** _____

# Hazardous Materials Operations
# JPR: HZMT-OPS-3

**Candidate:** _____

| | |
|---|---|
| **STANDARD: NFPA 472, 2013 Edition**<br>**Section(s): 5.2.2; 5.4.2; 6.2.4.1; 6.6.3.1(1)**<br>**Analyzing the Incident** | **Task:** Given an example of a scenario involving known hazardous materials, interpret the hazard and response information obtained from the current edition of the Emergency Response Guidebook (ERG) and a Material Safety Data Sheet (MSDS). |
| **PERFORMANCE OUTCOME:** | The candidate will complete this task within 30 minutes.<br>**Safety: A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.** |
| **EQUIPMENT REQUIRED:** When Possible utilize MSDS from JPR #2 and current edition of ERG. | |
| **CONDITIONS:** Whenever possible, integrate the evaluation of this JPR within a consolidated hazardous materials/WMD incident scenario. This will allow multiple JPR's to be evaluated effectively in conjunction with other hazardous materials/WMD incident scenario activities. | |

| No. | Task Steps - Hazardous Materials Scenario - Involved in fire | ✓ |
|---|---|---|
| 1 | Initiate incident management system according to National Incident Management System (NIMS) | |
| 2 | Container behavior | |
| 3 | Material behavior | |
| 4 | Product control measures | |
| 5 | Describe alternate plan if initial actions are unsuccessful | |
| 6 | Describe process to secure the scene and preserve evidence. | |

**Evaluator (Print & Sign)** _____ **Date:** _____

# Hazardous Materials Operations
# JPR: HZMT-OPS-3 Worksheet

**Candidate:** _____

**When Possible utilize MSDS from JPR #2 and current edition of ERG.**
**Identify the following hazard and response information.**

**Hazardous Materials Scenario - Fire Scenario - The candidate will complete this task within 30 minutes.**

1. **Describe Incident Management and Initial actions:** _____

2. **Describe container behavior and its effect on your actions:** _____

3. **Describe the material's behavior and its effect on your actions:** _____

4. **Describe product control measures and needs:** _____

**5. a. Describe alternate plan if initial actions are unsuccessful:**

**b. Describe size of initial isolation or evacuation area:**

**6. Describe process to secure scene and preserve evidence:**

**Evaluator** **(Print & Sign)** **Date:**

# Hazardous Materials Operations
# JPR: HZMT-OPS-4

**Candidate:** _____

| | |
|---|---|
| **STANDARD: NFPA 472, 2013 Edition**<br><br>**Section(s): 5.2.2; 5.4.2; 6.6.3.1(1)**<br><br>**Analyzing the Incident** | **Task:** Given an example of a scenario involving known hazardous materials, interpret the hazard and response information obtained from the current edition of the Emergency Response Guidebook (ERG) and a Material Safety Data Sheet (MSDS). |
| **PERFORMANCE OUTCOME:** | The candidate will complete this task within 30 minutes.<br><br>**Safety: A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.** |
| **EQUIPMENT REQUIRED:** When Possible utilize MSDS from JPR #2 and current edition of ERG. | |
| **CONDITIONS:** Whenever possible, integrate the evaluation of this JPR within a consolidated hazardous materials/WMD incident scenario. This will allow multiple JPR's to be evaluated effectively in conjunction with other hazardous materials/WMD incident scenario activities. | |

| No. | Task Steps - Hazardous Materials Scenario - Spill or Leak | ✓ |
|---|---|---|
| 1 | Initiate incident management system according to National Incident Management System (NIMS) | |
| 2 | Container behavior | |
| 3 | Material behavior | |
| 4 | Product control measures | |
| 5 | Describe alternate plan if initial actions are unsuccessful | |
| 6 | Describe process to secure the scene and preserve evidence. | |

**Evaluator (Print & Sign)** _____ **Date:** _____

# Hazardous Materials Operations
# JPR: HZMT-OPS-4 Worksheet

**Candidate:** _____

**When Possible utilize MSDS from JPR #2 and current edition of ERG.**
**Identify the following hazard and response information.**

**Hazardous Materials Scenario - Spill or Leak -**
**The candidate will complete this task within 30 minutes.**

1. **Describe Incident Management and Initial actions:** _____

2. **Describe container behavior and its effect on your actions:** _____

3. **Describe the material's behavior and its effect on your actions:** _____

4. **Describe product control measures and needs:** _____

**5. a. Describe alternate plan if initial actions are unsuccessful:**

**b. Describe size of initial isolation or evacuation area:**

**6. Describe process to secure scene and preserve evidence:**

**Evaluator** **(Print & Sign)** **Date:**

# Hazardous Materials Operations
# JPR: HZMT-OPS-5

**Candidate:** _____

| | |
|---|---|
| **STANDARD: NFPA 472, 2013 Edition**<br><br>**Section(s): 5.2.1.3.2(1)-(6)**<br><br>**Analyzing the Incident** | **Task:** : Given a pesticide label, identify each of the following pieces of information; then match the pieces of information to the overall significance in surveying the hazardous materials incident. |
| **PERFORMANCE OUTCOME:** | The candidate will complete this task within 15 minutes, with a minimum of 6 of 8 items answered correctly.<br><br>**Safety: A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.** |
| **EQUIPMENT REQUIRED:** Pesticide Label | |
| **CONDITIONS:** Whenever possible, integrate the evaluation of this JPR within a consolidated hazardous materials/WMD incident scenario. This will allow multiple JPR's to be evaluated effectively in conjunction with other hazardous materials/WMD incident scenario activities. | |

| No. | Task Steps | ✓ |
|---|---|---|
| 1 | Identify the Product Name: | |
| 2 | What does the signal word indicate? | |
| 3 | What is the signal word indicationg the lowest level of toxicity? | |
| 4 | What is the signal word indicationg the highest level of toxicity? | |
| 5 | Identify the Pest Control Product / EPA Registry Number: | |
| 6 | Identify the Precautionary Statement: (Harm to people) | |
| 7 | Identify the Hazard Statement: (Environment) | |
| 8 | What does the active ingredient do? | |

**Evaluator (Print & Sign)** _____ **Date:** _____

# Hazardous Materials Operations
# JPR: HZMT-OPS-5 Worksheet

**Candidate:** _____

**Pesticide Label -**
**The candidate will complete this task within 15 minutes.**

1. **Identify the product name:** _____

2. **What does the signal word indicate?** _____

3. **What is the signal word indicating the lowest level of toxicity?** _____

4. **What is the signal word indicating the highest level of toxicity?** _____

5. **Identify the Pest Control Product / EPA Registry Number:** _____

6. **Identify the Precautionary Statement: (Harm to people)** _____

7. **Identify the Hazard Statement: (Environment)** _____

8. **What does the active ingredient do?** _____

_____ _____

**Evaluator** (Print & Sign) **Date:**

# Hazardous Materials Operations
# JPR: HZMT-OPS-6

**Candidate:** _____

| | |
|---|---|
| **STANDARD: NFPA 472, 2013 Edition**<br><br>**Section(s): 5.4.4; 6.2.4.1 (3)-(4)**<br><br>**Implementing the Planned Response** | **Task:** Demonstrate donning PPE with self-contained breathing apparatus (SCBA)., working in, decontamination, and doffing. |
| **PERFORMANCE OUTCOME:** | The candidate will successfully demonstrate the ability to don, work in and doff PPE.<br><br>**Safety: A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.** |
| **EQUIPMENT REQUIRED:** Pesticide Label | |
| **CONDITIONS:** Whenever possible, integrate the evaluation of this JPR within a consolidated hazardous materials/WMD incident scenario. This will allow multiple JPR's to be evaluated effectively in conjunction with other hazardous materials/WMD incident scenario activities. | |

| No. | Task Steps | ✓ |
|---|---|---|
| 1 | Don structural firefighting gear or chemical protective clothing (Level B). | |
| 2 | Process for donning SCBA | |
| | a. Open cylinder fully. | |
| | b. Secure straps on SCBA. | |
| | c. Don face piece. | |
| | d. Check face seal. | |
| | e. Hook up air supply. | |
| 3 | Work in contaminated area. | |
| 4 | Exit contaminated area. | |
| 5 | Describe how to perform technical decontamination as part of a team | |
| 6 | Doff PPE as provided by AHJ | |
| 7 | Complete necessary documentation, as required by AHJ and place all equipment in a ready state for reuse. | |

**Evaluator (Print & Sign)** _____ **Date:** _____

# Hazardous Materials Operations
# JPR: HZMT-OPS-7

**Candidate:** _____

| | |
|---|---|
| **STANDARD: NFPA 472, 2013 Edition**<br>**Section(s): 6.6.3.1 (2)(j); 6.6.4.1 (1, 2,3 (J))**<br>**Implementing the Planned Response** | **Task:** Using the type of fire-fighting foam or vapor suppressing agent and foam equipment furnished by the authority having jurisdiction, demonstrate the proper application of the fire-fighting foam(s) or vapor suppressing agent(s) on a simulated spill or fire involving hazardous materials |
| **PERFORMANCE OUTCOME:** | The candidate will successfully demonstrate each ability identified within this JPR.<br>**Safety: A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.** |
| **EQUIPMENT REQUIRED:** Fire-fighting foam or vapor suppression agent, foam equipment, fire apparatus, hazardous liquid, and burn area. Full protective clothing and self contained breathing apparatus (SCBA). | |
| **CONDITIONS:** Whenever possible, integrate the evaluation of this JPR within a consolidated hazardous materials/WMD incident scenario. This will allow multiple JPR's to be evaluated effectively in conjunction with other hazardous materials/WMD incident scenario activities. | |

| No. | Task Steps | ✓ |
|---|---|---|
| 1 | Approach the spill or fire from uphill and upwind. | |
| 2 | Set nozzle to correct pattern (and GPM flow, if applicable). | |
| 3 | Use correct application procedures to effectively control vapors or fire | |
| | a. Banked down. | |
| | b. Roll on. | |
| | c. Rain down | |
| 4 | Did not disturb the foam blanket. | |
| 5 | Safely exited the hazardous area. | |

**Evaluator** **(Print & Sign)** _____ **Date:** _____

# Hazardous Materials Operations
# JPR: HZMT-OPS-8

**Candidate:** _____

| | |
|---|---|
| **STANDARD: NFPA 472, 2013 Edition**<br><br>**Section(s): 6.6.3.1 (1), (2a), (2c-i); 6.6.4.1 (3a), (3c-i)**<br><br>**Product Control** | **Task:** Given the appropriate tools and equipment, demonstrate how to perform the following defensive control activities:<br>a. Absorption<br>b. Damming<br>c. Diking<br>d. Dilution<br>e. Diversion<br>f. Retention<br>g. Vapor Dispersion<br>h. Remote valve shut-off |
| **PERFORMANCE OUTCOME:** | The candidate will as a member of a team, successfully demonstrate each ability identified within the checklist with at least 24 of 30 items completed correctly.<br><br>**Safety: A safety violation is grounds for automatic failure. All proctors present shall review the safety violation.** |
| **EQUIPMENT REQUIRED:** Personal protective equipment, self-contained breathing apparatus (SCBA), shovels, rakes, absorbent materials, dirt, sand or hay, plastic sheeting, and a leaking container. | |
| **CONDITIONS:** Whenever possible, integrate the evaluation of this JPR within a consolidated hazardous materials/WMD incident scenario. This will allow multiple JPR's to be evaluated effectively in conjunction with other hazardous materials/WMD incident scenario activities. | |

| No. | Task Steps | ✓ |
|---|---|---|
| 1 | Absorption: | |
| | a. Use common, available materials. | |
| | b. Avoid contact with the hazardous material. | |
| | c. Ensure drains do not become contaminated. | |
| | d. Ensure hazardous material is absorbed into absorbent material. | |
| 2 | Damming: (Overflow and Underflow) | |
| | a. Use common, available materials. | |
| | b. Avoid contact with the hazardous material. | |
| | c. Ensure dam is not breached. | |
| 3 | Diking: | |
| | a. Use common, available materials. | |
| | b. Avoid contact with the hazardous material. | |
| | c. Form a "v" and a "circle" dike. | |
| | d. Ensure hazardous material does not enter drains or manholes. | |

| No. | Task Steps | ✓ |
|---|---|---|
| 4 | Dilution | |
| | a. Use common, available materials. | |
| | b. Avoid contact with the hazardous material. | |
| | c. Ensure the hazardous material is water soluble. | |
| | d. Do NOT overflow retention pond of hazardous material. | |
| 5 | Diversion: | |
| | a. Use common, available materials. | |
| | b. Avoid contact with the hazardous material. | |
| | c. Ensure hazardous material is diverted away from drains and waterways. | |
| | d. Make sure the hazardous material does NOT breach the diversion. | |
| 6 | Retention: | |
| | a. Define the purpose of retention. | |
| | b. Use common, available materials. | |
| | c. Avoid contact with the hazardous material | |
| | d. Ensure product flow does not exceed retention area. | |
| 7 | Vapor Dispersion: | |
| | a. Avoid contact with the hazardous material. | |
| | b. Eliminate ignition sources, if applicable. | |
| | c. Use water spray or fans to control dispersion. | |
| | d. Move vapors away from threatened area. | |
| 8 | Remote valve shut-off: | |
| | a. Avoid contact with the hazardous material. | |
| | b. Eliminate ignition sources, if applicable. | |
| | c. Manipulate valve as instructed to control the flow of the product. | |

**Evaluator (Print & Sign)** _____ **Date:** _____