



CMCB

**COLORADO METROPOLITAN
CERTIFICATION BOARD**

**Hazardous Materials Operations/WMD
Performance Evaluation Sheets**

Revised December 2014

Based on the National Fire Protective Association
Standard 472 Edition 2013

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Hazardous Materials Operations/WMD Performance Evaluation Sheets

Hazardous Materials Awareness Personnel

Awareness Actions for a Hazardous Materials/WMD Incident A-1

Hazardous Materials Operations Level Response

Emergency Response Guidebook (ERG) HM-1
Establish and Enforce Scene Control HM-2
Demonstrate Decontamination Procedures HM-3
Initiate the Incident Command System (ICS) HM-4
Material Safety Data Sheet (MSDS) HM-5

Mission Specific Competencies – Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) Donning and Working in PPE PPE-1
Personal Protective Equipment (PPE) Maintenance PPE-2
Personal Protective Equipment (PPE) Undergo Technical Decontamination
and Doffing of PPE PPE-3

Mission Specific Competencies – Product Control

Product Control - Foam Application and Vapor Suppression PC-1
Product Control - Absorption PC-2
Product Control - Diking PC-3
Product Control - Overflow Damming PC-4
Product Control - Underflow Damming PC-5
Product Control - Defensive Control Activities (Diversion) PC-6
Product Control - Shutoff Devices on Flammable Cargo Tanks PC-7
Product Control - Shutoff Devices at Fixed Facilities PC-8
Product Control - Vapor Dispersion PC-9
Product Control - Retention PC-10

** Candidates will demonstrate all competencies during a hazardous awareness/
operations course. Certification will require a practical test with skill stations utilizing a
selection of the performance evaluation sheets. The evaluation will be conducted in-
house by a CMCB Certified Evaluator III or equivalent whom did not function as the lead
instructor for the course.*

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Hazardous Materials Operations/WMD

Skill Performance Evaluation

Objectives: NFPA 472 - 4.2.2(2,3), 4.3.2(1,2), 4.4.1(4-6), 4.4.2, 5.1.2.2, 5.2.1, 5.2.2, 5.3.1(3, 4) (2013 edition)		Sheet Number: A-1	
Primary Tasks: Awareness Actions for a Hazardous Materials/WMD Incident			
Candidate Performance			Fail
<i>From an appropriate distance</i>			
1. Survey the hazardous materials/WMD incident from a safe location			
2. Collect hazard and response information: a) On scene observations b) ChemTrec (verbalize) c) MSDS d) ERG			
3. Establish scene control and protect route of entry a) Basic precautions to protect themselves/others b) Basic precautions when providing medical care			
4. Consider protective measures for response personnel and public include product isolation, evacuation, or shelter in place			
5. Determine proper PPE			
6. Initiate proper notifications for the AHJ			
Overall Results (must pass ALL steps)			
Evaluator Comments			
Location:	Date:	ID Number:	
Candidate (Print):		Candidate (Sign):	
Evaluator (Print):		Evaluator (Sign):	

Colorado Metropolitan Certification Board Hazardous Materials Operations/WMD

Skill Performance Evaluation

Objectives: NFPA 472 - 5.2.3.1 (2013 edition)		Sheet Number: HM-1	
Primary Tasks: Using the Emergency Response Guidebook (ERG)			
Candidate Performance			Fail
1. Determine correct page for a product based on placard			
2. Identify the product name from a UN ID#			
3. Identify proper protective clothing for a product			
4. Identify isolation distances			
5. Identify potential hazards			
6. Identify type of transport vehicle if applicable			
		Pass	Fail
Overall Results (must pass ALL steps)			
Evaluator Comments			
Location:	Date:	ID Number:	
Candidate (Print):		Candidate (Sign):	
Evaluator (Print):		Evaluator (Sign):	

Colorado Metropolitan Certification Board Hazardous Materials Operations/WMD

Skill Performance Evaluation

Objectives: NFPA 472 - 5.1.2.2(3c), 5.3.2(2), 5.3.4, 5.4.1(4) and Ops 1, 6.2.4.1(4), 6.2.5.1 (2013 edition)		Sheet Number: HM-3	
Primary Tasks: Demonstrate Decontamination Procedures.			
Candidate Performance			Fail
<i>Demonstrate the ability to perform Emergency Decontamination.</i>			
1. Identify the contaminated person			
2. Remove contaminated person from threatened area (ambulatory)			
3. Remove contaminated person's clothing or PPE and flood with water if the person is an emergency responder, leave mask in place			
4. Maintain continuous washing until suspected contaminant is removed			
5. Remove contaminated person's SCBA, leaving mask in place			
6. Remove victim to clean area			
7. Inform medical personnel of contaminant			
8. Document exposure and notify receiving medical facility			
		Pass	Fail
Overall Results (must pass ALL steps)			
Evaluator Comments			
Location:		Date:	
Candidate (Print):		Candidate (Sign):	
Evaluator (Print):		Evaluator (Sign):	

Colorado Metropolitan Certification Board Hazardous Materials Operations/WMD

Skill Performance Evaluation

Objectives: NFPA 472 - 5.4.3(1-7) (2013 edition)		Sheet Number: HM-4	
Primary Tasks: Initiate the Incident Command System (ICS).			
Candidate Performance			Fail
1. Establish Incident Command			
2. Identify location for the Command Post			
3. Identify duties/ responsibilities for Incident Safety Officer and Hazardous Materials Branch/Group			
4. Identify role of operations level responder			
5. Explain procedures for requesting additional resources			
6. Describe roles/ responsibilities of assisting agencies that respond to HazMat/ WMD incidents			
		Pass	Fail
Overall Results (must pass ALL steps)			
Evaluator Comments			
Location:	Date:	ID Number:	
Candidate (Print):		Candidate (Sign):	
Evaluator (Print):		Evaluator (Sign):	

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Skill Performance Evaluation

Objectives: NFPA 472 - 5.2.2(3) (2013 edition)		Sheet Number: HM-5	
Primary Tasks: Identify Material Safety Data Sheet (MSDS)			
Candidate Performance			Fail
1. Identify the physical and chemical characteristics of the material to include specific gravity			
2. Identify the physical hazards of the material			
3. Identify the health hazards of the material			
4. Identify the signs and symptoms of exposure to the material			
5. Identify the routes of entry into the body (most common)			
6. Identify the permissible exposure limits			
7. Identify procedures for cleanup of spills and leaks			
8. Identify the applicable control measures, including personal protective equipment			
9. Identify the emergency first aid procedures for exposure			
		Pass	Fail
Overall Results (must pass ALL steps)			
Evaluator Comments			
Location:	Date:	ID Number:	
Candidate (Print):		Candidate (Sign):	
Evaluator (Print):		Evaluator (Sign):	

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Skill Performance Evaluation

Objectives: NFPA 472 - 5.3.3, 5.3.3(1,2), 5.4.4, 6.2.3.1(3), 6.2.4, 6.2.4.1(3) (2013 edition)		Sheet Number: PPE-1	
Primary Tasks: Personal Protective Clothing (PPE) Donning and Working in PPE			
Candidate Performance			Fail
Skills for Donning Level A or B suit			
Determine PPE given the following: task, chemical information and a resistance chart			
Inspect PPE prior to donning			
Adjust equipment as needed			
Don suit and boots			
Don SCBA and facepiece			
Don inner and outer gloves			
Don head protection			
Demonstrate working in PPE			
Skills for person, 'Valet', assisting in Donning of PPE			
Assist Donning suit, boots, SCBA and gloves			
Tape* suit to boots and gloves			
Tape* face piece, if non-encapsulating suit			
Tape* zipper if required			
Demonstrate working safely in PPE			
*Leave a tab, 2" minimum, on all tape ends for ease of removal.			Pass
Overall Results (must pass ALL steps)			Fail
Evaluator Comments			
Location:	Date:	ID Number:	
Candidate (Print):		Candidate (Sign):	
Evaluator (Print):		Evaluator (Sign):	

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Skill Performance Evaluation

Objectives: NFPA 472 - 5.4.4, 5.4.4(7), 6.2.4.1(5) (2013 edition)		Sheet Number: PPE-2	
Primary Tasks: Personal Protective Equipment (PPE) Maintenance			
Candidate Performance			Fail
1. Demonstrate proper inspection, cleaning and maintenance of PPE			
2. Verbalize testing of PPE			
3. Verbalize storage of PPE			
		Pass	Fail
Overall Results (must pass ALL steps)			
Evaluator Comments			
Location:	Date:	ID Number:	
Candidate (Print):		Candidate (Sign):	
Evaluator (Print):		Evaluator (Sign):	

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Skill Performance Evaluation

Objectives: NFPA 472 - 6.2.4.1(3) 6.2.4.1(4) (2013 edition)	Sheet Number: PPE-3	
Primary Tasks: Technical Decontamination and Doffing of PPE		
Candidate Performance	Pass	Fail
Undergoes Technical Decon:		
Drops tools and equipment at decon corridor entry point		
Proceeds to wash station and completes washing procedures		
Proceeds through rinse station and completes rinsing procedures		
Proceeds to Doffing area		
Doffing Level B PPE:		
Minimizes cross-contamination		
Removes hard hat or helmet		
Loosen SCBA Harness straps, maintain straps, slide arms out, maintains regulator affixed to face piece; facepiece remains in place		
Remove outer gloves		
Removes suit by rolling garment away from body		
Removes boots		
Removes face piece		
Removes inner gloves		
Place all PPE in proper disposal area		
Complete medical evaluation (support staff)		
Complete activity log documentation		
	Pass	Fail
Overall Results (must pass ALL steps)		
Evaluator Comments		
Location:	Date:	ID Number:
Candidate (Print):	Candidate (Sign):	
Evaluator (Print):	Evaluator (Sign):	

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Skill Performance Evaluation

Objectives: NFPA 472 - 6.6.4.1, 6.6.4.1(1), 6.6.4.1(3)(j) (2013 edition)		Sheet Number: PC-1	
Primary Tasks: Foam Application and Vapor Suppression			
Candidate Performance			Fail
1. Determine if foam is compatible with hazardous material (verbalize)			
2. Wears appropriate protective clothing properly			
3. Assembles appliances (eductor, hoseline, nozzle, foam aspirator)			
4. Matches nozzle to eductor			
5. Introduces eductor to foam concentrate			
6. Sets the eductor metering valve to concentrate percentage rating			
7. Opens nozzle fully			
8. Charges hoseline and flows water through nozzle until foam appears			
9. Applies foam by demonstrating one of the following methods (roll-on, bank-down, rain-down)			
10. Establishes an adequate vapor suppression blanket			
11. Avoid breaking the blanket once applied			
12. Monitor the integrity of the blanket and atmosphere for flammable vapors (verbalize)			
		Pass	Fail
Overall Results (must pass ALL steps)			
Evaluator Comments			
Location:	Date:	ID Number:	
Candidate (Print):		Candidate (Sign):	
Evaluator (Print):		Evaluator (Sign):	

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Skill Performance Evaluation

Objectives: NFPA 472 - 5.4.4, 6.6, 6.6.4.1(c) (2013 edition)	Sheet Number: PC-4	
Primary Tasks: Product Control - Overflow Dam		
Candidate Performance	Fail	
Using the equipment at the evaluation station, build an <u>Overflow Dam</u>.		
1. Select proper damming technique for hazardous materials release (verbalize)		
2. Determine if product is soluble in water (verbalize)		
3. Use proper PPE for product spilled and avoid exposure to product		
4. Build a dam high enough to capture heavier materials below the surface		
5. Construct a dam at narrow point of waterway far enough down stream from spill location to capture the release		
6. Place tubes in dirt near top of dam		
7. Secure tubes with dirt at an angle to allow maximum water flow without moving product		
8. Products heavier than water are usually toxic; take necessary precautions (verbalize)		
9. Re-evaluate overflow dam to insure effective operation for water flow and spilled product retention (verbalize)		
	Pass	Fail
Overall Results (must pass ALL steps)		
Evaluator Comments		
Location:	Date:	ID Number:
Candidate (Print):		Candidate (Sign):
Evaluator (Print):		Evaluator (Sign):

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Skill Performance Evaluation

Objectives: NFPA 472 - 5.4.4, 6.6, 6.6.4.(c) (2013 edition)		Sheet Number: PC-5	
Primary Tasks: Product Control - Underflow Dam			
Candidate Performance			Fail
Using the equipment at the evaluation station, build an <u>Underflow Dam</u>			
1. Select proper damming technique for hazardous materials release			
2. Determine if product is soluble in water (verbalize)			
3. Uses proper PPE for product spilled and avoid exposure to product			
4. Constructs dam at a narrow point of waterway far enough downstream from spill location to capture the release			
5. Products lighter than water may be flammable; take appropriate precautions (verbalize)			
6. Booms or pads are placed on the surface to absorb hazardous material			
7. Place pipes or tubes in bottom of dam for uncontaminated water to pass through			
8. PVC pipes are deep enough to prevent whirlpooling			
9. Re-evaluate underflow dam to insure effective operation for water flow and spilled product retention			
Overall Results (must pass ALL steps)			Pass
Evaluator Comments			Fail
Location:		Date:	
Candidate (Print):		ID Number:	
Candidate (Sign):			
Evaluator (Print):		Evaluator (Sign):	

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Skill Performance Evaluation

Objectives: NFPA 472 - 6.6.4.1, 6.6.4.1(3i) (3j) (2013 edition)		Sheet Number: PC-9	
Primary Tasks: Defensive Control Activities (Vapor Dispersion)			
Candidate Performance			Fail
Vapor Dispersion			
1. Identify the product			
2. Wear appropriate protective clothing			
3. Avoid personal exposure			
4. Select water stream or blower fan based on hazardous material			
5. Fog stream disperses vapors away from potential exposures			
6. Determine the effect of vapor dispersion in relationship to vapor concentration			
7. Confine and analyze potential run-off contaminant (verbalize)			
8. Blower fans must be rated for hazardous atmospheres (verbalize)			
		Pass	Fail
Overall Results (must pass ALL steps)			
Evaluator Comments			
Location:	Date:	ID Number:	
Candidate (Print):		Candidate (Sign):	
Evaluator (Print):		Evaluator (Sign):	

