



**Official Skill Sheets for Practical Skills  
Ontario, Canada**

**Hazardous Materials/Weapons of Mass Destruction  
Operations (Core) and Mission Specific  
(PPE and Product Control)  
NFPA 472, Chapter 5, 6.2 and 6.6, 2013 Edition**

**National Fire Protection Association Standard for  
Hazardous Materials/WMD Responder  
Professional Qualifications**

**Please send completed skill sheets to:**

**Manager  
Academic Standards and Evaluation Section  
Ministry of Community Safety and Correctional Services  
Office of the Fire Marshal and Emergency Management  
25 Morton Shulman Avenue, 2<sup>nd</sup> Floor  
North York, Ontario  
M3M 0B1  
[ofmtestingandcertification@ontario.ca](mailto:ofmtestingandcertification@ontario.ca)**



As the Hazardous Materials/Weapons of Mass Destruction Operations (Core) and Mission Specific (PPE and Product Control) course is predominantly a "hands-on" program, the testing of the skills learned during the course is as important as testing the knowledge components. The successful completion of every skill sheet in this booklet is necessary to fulfill the requirements of each Job Performance Requirement listed in NFPA 472 - 2013.

Successful completion of all the practical skills contained in this booklet is required for eligibility for any student to test for Ontario Office of the Fire Marshal and Emergency Management Hazardous Materials/WMD Operations (Core) and Mission Specific (PPE and Product Control) - level certification. Students must be prepared for any of the practical skills contained in this booklet to be on a specific certification test. Ontario Office of the Fire Marshal and Emergency Management Practical Skills Certification Tests are designed so that there is the potential for any of the practical skills to be tested. Every skill on any practical skills test will contain the same components and steps as outlined in this booklet.

It is the responsibility of every Hazardous Materials/Weapons of Mass Destruction Operations (Core) and Mission Specific (PPE and Product Control) Lead Instructor to ensure that each student has passed every skill. The Lead Instructor must verify that each skill sheet in this booklet has been signed and indicates that the student has successfully mastered the skill.

Each student's Skills Book contains a "Verification of Successful Completion of Practical Skills". **These completed and signed forms must be submitted to the Ontario Office of the Fire Marshal and Emergency Management prior to the date of the Practical Skills Certification test. Only those individuals whose forms have been received by the Ontario Office of the Fire Marshal and Emergency Management will be eligible to take the Practical Skills Certification test.**



VERIFICATION OF SUCCESSFUL COMPLETION OF PRACTICAL SKILLS

This completed and signed form must be submitted to the Ontario Office of the Fire Marshal and Emergency Management prior to the date of the Practical Skills Certification test. Only those individuals whose forms have been received by the Ontario Office of the Fire Marshal and Emergency Management will be eligible to take the Practical Skills Certification test.

To be completed by candidate:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ Prov: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Department/Agency: \_\_\_\_\_

Hazardous Materials/Weapons of Mass  
Destruction Operations (Core), PPE  
and Product Control Course Location: \_\_\_\_\_

Hazardous Materials/Weapons of Mass  
Destruction Operations (Core), PPE  
and Product Control Course Dates: \_\_\_\_\_

To be completed by the Lead Instructor:

As Lead Instructor for this course, I verify that the above candidate has successfully completed all of the practical skills required for the level of:

Hazardous Materials/Weapons of Mass Destruction Operations (Core) and Mission Specific (PPE and Product Control)

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

STUDENT NAME:

VERIFICATION OF SUCCESSFUL COMPLETION OF PRACTICAL SKILLS

This completed and signed form must be submitted to the Ontario Office of the Fire Marshal and Emergency Management prior to the date of the Practical Skills Certification test. Only those individuals whose forms have been received by the Ontario Office of the Fire Marshal and Emergency Management will be eligible to take the Practical Skills Certification test.

To be completed by the Lead Evaluator present for each of the practical skills:

	Pass/Fail
<b>Implementing the Planned Response for a Hazardous Materials/WMD Incident</b> NFPA 472-2013, 5.1.2.2 (3) (A) (B) (C) (D)	
Evaluator signature: _____ Date: _____	
<b>Evaluating the Status of Defensive Action</b> NFPA 472-2013, 5.1.2.2 (4) (A)	
Evaluator signature: _____ Date: _____	
<b>Communicating the Status of the Planned Response</b> NFPA 472-2013, 5.1.2.2 (4) (B), 5.5.2	
Evaluator signature: _____ Date: _____	
<b>Demonstrating Emergency Decontamination of a Responder</b> NFPA 472-2013, 5.1.2.2 (3) (E), 5.4.1 (4)	
Evaluator signature: _____ Date: _____	
<b>Using Protective Clothing and Respiratory Protection and Performing Control Options: Remote Valve Shutoff</b> NFPA 472-2013, 6.2.4.1, 6.2.4.1 (3), 6.2.5.1, 6.6.4.1, 6.6.4.1 (3) (H)	
Evaluator signature: _____ Date: _____	



STUDENT NAME:

<b>Performing Control Options: Absorption/Adsorption</b> NFPA 472-2013, 6.6.4.1(3) (A) (B)	
<i>Evaluator signature:</i> _____ <i>Date:</i> _____	
<b>Establishing ICS, Preserving Evidence, Performing Control Options: Damming</b> NFPA 472-2013, 5.1.2.2 (3) (A) (B) (C) (D), 5.1.2.2 (4) (A) (B), 5.5.2, 6.2.1.2, 6.6.1.2.2, 6.6.4.1 (3) (C)	
<i>Evaluator signature:</i> _____ <i>Date:</i> _____	
<b>Performing Control Options: Diking, Diversion</b> NFPA 472-2013, 6.6.4.1, 6.6.4.1 (3) (D) (F)	
<i>Evaluator signature:</i> _____ <i>Date:</i> _____	
<b>Performing Control Options: Dilution</b> NFPA 472-2013, 6.6.4.1, 6.6.4.1 (3) (E)	
<i>Evaluator signature:</i> _____ <i>Date:</i> _____	
<b>Performing Control Options: Retention</b> NFPA 472-2013, 6.6.4.1, 6.6.4.1 (3) (G)	
<i>Evaluator signature:</i> _____ <i>Date:</i> _____	
<b>Performing Control Options: Vapour Dispersion</b> NFPA 472-2013, 6.6.4.1, 6.6.4.1 (3) (I)	
<i>Evaluator signature:</i> _____ <i>Date:</i> _____	
<b>Performing Control Options: Vapour Suppression</b> NFPA 472-2013, 6.6.4.1, 6.6.4.1 (1), 6.6.4.1 (3) (J)	
<i>Evaluator signature:</i> _____ <i>Date:</i> _____	
<b>Demonstrating Procedures to Support Technical Decontamination of a Victim</b> NFPA 472-2013, 6.2.4.1 (4)	
<i>Evaluator signature:</i> _____ <i>Date:</i> _____	



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**HAZARDOUS MATERIALS/WMD OPERATIONS (CORE) AND MISSION SPECIFIC  
(PPE AND PRODUCT CONTROL)**

**GOAL**

Successful completion of the practical skills in this section is necessary to fulfill the requirements of the following sections of NFPA 472-2013:

**Hazardous Materials/Weapons of Mass Destruction Incidents Standard**

**5.1.2.2** When responding to hazardous materials/WMD incidents, operations level responders shall be able to perform the following tasks:

- (3) Implement the planned response for a hazardous materials/WMD incident to favorably change the outcomes consistent with the emergency response plan and/or standard operating procedures by completing the following tasks:
  - (a) Establish and enforce scene control procedures, including control zones, emergency decontamination, and communications.
  - (b) Where criminal or terrorist acts are suspected, establish means of evidence preservation.
  - (c) Initiate an incident command system (ICS) for hazardous materials/WMD incidents.
  - (d) Perform tasks assigned as identified in the incident action plan.
  - (e) Demonstrate emergency decontamination.
- (4) Evaluate the progress of the actions taken at a hazardous materials/WMD incident to ensure that the response objectives are being met safely, effectively, and efficiently by completing the following tasks:
  - (a) Evaluate the status of the actions taken in accomplishing the response objectives.
  - (b) Communicate the status of the planned response.

**5.4.1 Establishing Scene Control.**

Given two scenarios involving hazardous materials/WMD incidents, the operations level responder shall explain how to establish and maintain scene control, including control zones and emergency decontamination, and communications between responders and to the public and shall meet the following requirements:

- (4)\*Demonstrate the ability to perform emergency decontamination.

**5.5.2 Communicating the Status of the Planned Response.**

Given two scenarios involving hazardous materials/WMD incidents, including the incident action plan, the operations level responder shall report the status of the planned response through the normal chain of command by completing the following requirements:

- (1) Identify the procedures for reporting the status of the planned response through the normal chain of command.
- (2) Identify the methods for immediate notification of the incident commander and other response personnel about critical emergency conditions at the incident.



### **6.2.1.2 Goal.**

The goal of the competencies in this section shall be to provide the operations level responder assigned to use personal protective equipment with the knowledge and skills to perform the following tasks safely and effectively:

- (1) Plan a response within the capabilities of personal protective equipment provided by the AHJ in order to perform mission specific tasks assigned.
- (2) Implement the planned response consistent with the standard operating procedures and site safety and control plan by donning, working in, and doffing personal protective equipment provided by the AHJ.
- (3) Terminate the incident by completing the reports and documentation pertaining to personal protective equipment.

### **6.2.4.1 Using Protective Clothing and Respiratory Protection.**

Given the personal protective equipment provided by the AHJ, the operations level responder assigned to use personal protective equipment shall demonstrate the ability to don, work in, and doff the equipment provided to support mission-specific tasks by completing the following requirements:

- (3) Demonstrate the ability to don, work in, and doff personal protective equipment provided by the AHJ
- (4) Demonstrate local procedures for responders undergoing the technical decontamination process.

### **6.2.5.1 Reporting and Documenting the Incident.**

Given a scenario involving a hazardous materials/WMD incident, the operations level responder assigned to use personal protective equipment shall document use of the personal protective equipment by completing the documentation requirements of the emergency response plan or standard operating procedures regarding PPE.

### **6.6.1.2.2**

When responding to hazardous materials/WMD incidents, the operations level responder assigned to perform product control shall be able to perform the following tasks:

- (1) Plan an initial response within the capabilities and competencies of available personnel, personal protective equipment, and control equipment and in accordance with the emergency response plan or standard operating procedures by completing the following tasks:
  - (a) Describe the control options available to the operations level responder.
  - (b) Describe the control options available for flammable liquid and flammable gas incidents

### **6.6.4.1 Performing Control Options.**

Given an incident action plan for a hazardous materials/WMD incident, within the capabilities and equipment provided by the AHJ, the operations level responder assigned to perform product control shall demonstrate control functions set out in the plan by completing the following requirements as prescribed by the AHJ:





- (1) Using the type of special purpose or hazard suppressing foams or agents and foam equipment furnished by the AHJ, demonstrate the application of the foam(s) or agent(s) on a spill or fire involving hazardous materials/WMD.
- (3) Given the required tools and equipment, demonstrate how to perform the following control activities:
  - (a) Absorption
  - (b) Adsorption
  - (c) Damming
  - (d) Diking
  - (e) Dilution
  - (f) Diversion
  - (g) Retention
  - (h) Remote valve shutoff
  - (i) Vapor dispersion
  - (j) Vapor suppression



## Scenarios for Use with Skills 1, 2, 3 and 4

### SCENARIO ONE:

#### Fire at a Chemical Plant

Your fire department has three engines, staffed with nine personnel; one ladder truck staffed with four personnel; one EMS unit with three personnel; and one chief officer on duty each day. Your hazardous materials team is a mutual aid response as is any additional equipment and manpower you may request.

Today you are the officer of the first arriving engine and you are in charge.

At 10 AM today your department is dispatched to a report of a fire at the Ajax Chemical Company, 123 Main Street, Anytown, Ontario 12345; the caller reports a spill and fire in the raw chemical storage area of the plant. The caller said two workers had the chemical on them.

The fire hydrant system supplying the Ajax Chemical Company is very good and water supply should not be an issue. The raw chemical storage area is separated from the main plant by a gravel driveway, a distance of approximately 50 feet. The raw chemical storage area is a metal building and is an open sided style shed. The driveway and ground is sloped towards an open dirt ditch that runs to a nearby creek. The raw chemical storage shed is storing **Diethylamine, UN 1154**, a flammable and corrosive liquid.

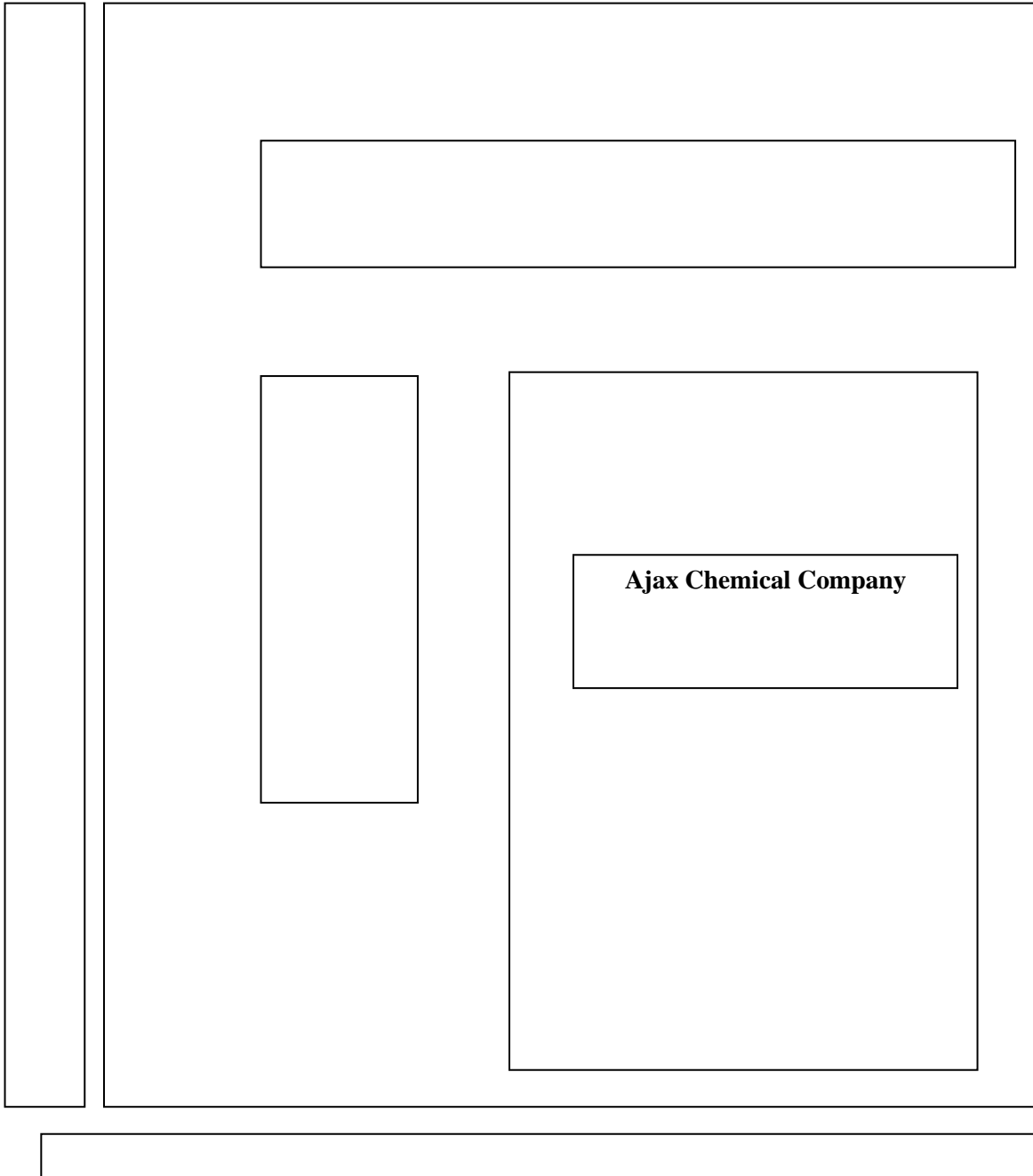
Upon your arrival you notice a chemical running into the ditch and a spill and fire in the shed area involving approximately 5 plastic totes with an exposure of approximately 50 - 55 gallon drums.

Based on the skill presented to you take the appropriate actions.



**Ajax Chemical Company**

Property Line





## SCENARIO TWO:

### Spill/Leak – Highway Incident

Your fire department has three engines, staffed with nine personnel; one ladder truck staffed with four personnel; one EMS unit with three personnel; and one chief officer on duty each day. Your hazardous materials team is a mutual aid response as is any additional equipment and manpower you may request.

Today you are the officer of the first arriving engine and you are in charge.

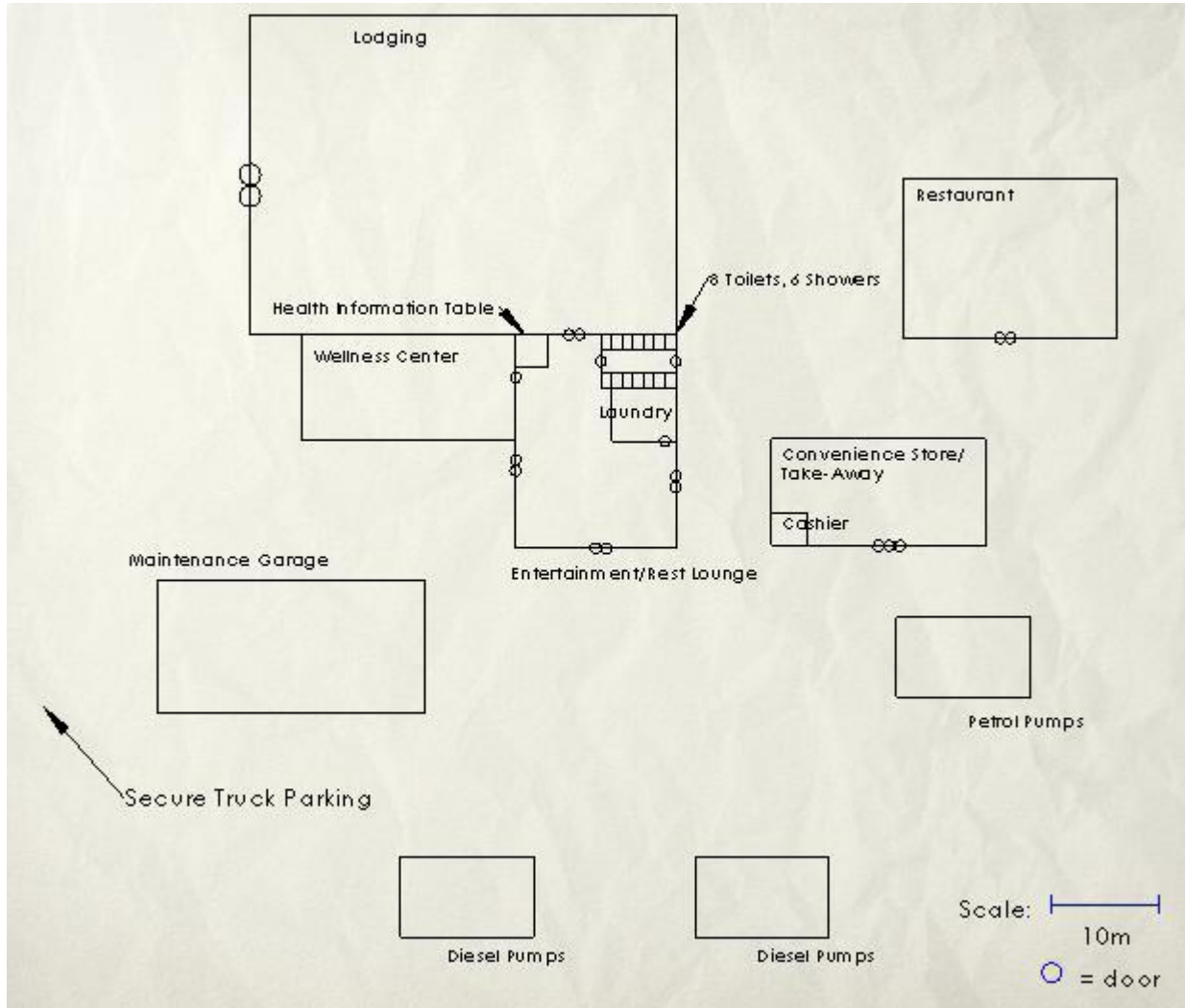
At 12:30 PM, today your department is dispatched by the police department to a report of a chemical leak coming out of the rear doors of a semi-tractor trailer parked at Bob's Truck Stop and Restaurant, 834 High Street, Anytown, Ontario 12345; the caller reports the leak is liquid and is pooling under the trailer and running towards the storm sewer. The police dispatcher said the driver and one police officer were contaminated with whatever is leaking from the trailer and they are in the maintenance garage area of the truck stop.

Upon your arrival you notice the parking areas of the Truck Stop-Restaurant are almost full since this is a very popular restaurant and its lunch time. The leaking semi-tractor trailer and a police car are parked along with several other trucks in a lot close to the restaurant and you notice the trailer has a placard that reads **1288**.

Based on the skill presented to you take the appropriate actions.



**Bob's Truck Stop and Restaurant**





OPERATIONS (CORE) – NFPA 472-2013, 5.1.2.2 (3) (A) (B) (C) (D)

IMPLEMENTING THE PLANNED RESPONSE FOR A HAZARDOUS MATERIALS/WMD  
INCIDENT

STUDENT NAME:

SKILL SHEET # 1

**Skill Objective:** Implement the planned response for a hazardous materials/WMD incident to favorably change the outcomes.

**Skill Procedure:**

1. The candidate shall wear appropriate PPE, including SCBA as necessary.
2. The candidate shall be provided with additional personnel and all equipment necessary to perform emergency decontamination.
3. The candidate shall be given a scenario involving hazardous materials/WMD and shall interpret the hazard and response information.
4. The candidate shall initiate an incident management system, establish and enforce scene procedures including control zones, emergency decontamination, and communications.
5. The candidate shall determine if the incident involves a suspected criminal or terrorist act and shall describe procedures to preserve evidence.
6. The candidate shall demonstrate emergency decontamination procedures.
7. The candidate shall have 30 minutes to complete this skill.

The candidate shall be given a scenarios involving hazardous materials/WMD and shall interpret the hazard and response information, shall initiate an incident management system, establish and enforce scene procedures including control zones, emergency decontamination, and communications, shall determine if the incident involves a suspected criminal or terrorist act and shall describe procedures to preserve evidence, and shall demonstrate emergency decontamination procedures.

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
<b>SCENARIO ONE (Fire at a Chemical Plant)</b>	
<b>SCENARIO TWO (Spill/Leak-Highway Incident)</b>	
1. The candidate shall initiate an incident command system (ICS) according to the standard operating procedures.	

**IMPLEMENTING THE PLANNED RESPONSE FOR A HAZARDOUS MATERIALS/WMD  
INCIDENT (CONTINUED ON NEXT PAGE)**



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

OPERATIONS (CORE) – NFPA 472-2013, 5.1.2.2 (3) (A) (B) (C) (D)

IMPLEMENTING THE PLANNED RESPONSE FOR A HAZARDOUS MATERIALS/WMD  
INCIDENT

STUDENT NAME:

SKILL SHEET # 1

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
2. The candidate shall establish and enforce scene procedures including control zones, emergency decontamination, and communications.	
3. Perform task as identified in the incident action plan.	
4. Determine if criminal or terrorist acts are suspected.	
5. Describe procedures to preserve evidence at a hazardous materials/WMD incident involving suspected criminal or terrorist acts.	
6. Demonstrates emergency decontamination.	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate's Grade:***

***Pass***

***Fail***

***Evaluator's Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

OPERATIONS (CORE) – NFPA 472-2013, 5.1.2.2 (4) (A)  
EVALUATING THE STATUS OF DEFENSIVE ACTION

STUDENT NAME:

SKILL SHEET # 2

**Skill Objective:** Evaluating the Status of Defensive Actions

**Skill Procedure:**

1. The candidate shall be given the instructions below before beginning this evaluation.
2. The candidate given a scenario (evaluator will furnish or use a scenarios below) shall identify the considerations for evaluating whether defensive operations are effective in accomplishing the objectives and describe the circumstances under which it would be prudent to withdraw from a hazardous material incident.
3. The candidate shall verbally describe those circumstances to the evaluator.
4. The candidate shall have 15 minutes to complete this skill.

The candidate shall be given a scenario with information on the equipment, manpower, and location and shall then verbally describe to the evaluator the response and evaluate its effectiveness. The candidate shall then verbally describe the circumstances in which it would be prudent to withdraw from the incident.

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
<b>SCENARIO ONE (Fire at a Chemical Plant)</b>	
<b>SCENARIO TWO (Spill/Leak)</b>	
1. Verbally identifies what is needed to stabilize the incident.	
2. Verbally identifies what could cause the incident to increase in intensity.	
3. Verbally identifies when it would be prudent to withdraw for the incident.	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate's Grade:***

*Pass*

*Fail*

***Evaluator's Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_





ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

OPERATIONS (CORE) – NFPA 472-2013, 5.1.2.2 (4) (B); 5.5.2  
COMMUNICATING THE STATUS OF THE PLANNED RESPONSE

STUDENT NAME:

SKILL SHEET # 3

**Skill Objective:** Communicating the Status of the Planned Response

**Skill Procedure:**

1. The candidate shall be given the instructions below before beginning this evaluation.
2. The candidate shall be given one of the two scenarios below.
3. The candidate shall communicate then status of the planned response to the incident commander through the normal chain of command and identify the methods for immediate notification of the incident commander and other response personnel about critical emergency conditions at the incident.
4. The candidate shall verbally describe those circumstances to the evaluator.
5. The candidate shall have 15 minutes to complete this skill.

The candidate shall be provided with a hazardous materials incident description, and a planned response. The candidate shall verbally identify the following information. Identify the methods of communicating the status of the planned response to the incident commander through the normal chain of command. Identify the methods for immediate notification of the incident commander and other response personnel about critical emergency conditions at the incident.

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
<b>SCENARIO ONE (Fire at a Chemical Plant)</b>	
1. Verbally identifies the methods for communicating the status of the planned response to the incident commander through the normal chain of command.	
2. Verbally identifies the methods for immediate notification of the incident commander and other response personnel about critical emergency conditions at the incident.	

**COMMUNICATING THE STATUS OF THE PLANNED RESPONSE (CONTINUED ON NEXT PAGE)**



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

OPERATIONS (CORE) – NFPA 472-2013, 5.1.2.2 (4) (B); 5.5.2  
COMMUNICATING THE STATUS OF THE PLANNED RESPONSE

STUDENT NAME:

SKILL SHEET # 3

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
<b>SCENARIO TWO (Spill/Leak-Highway Incident)</b>	
3. Verbally identifies the methods for communicating the status of the planned response to the incident commander through the normal chain of command.	
4. Verbally identifies the methods for immediate notification of the incident commander and other response personnel about critical emergency conditions at the incident.	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate's Grade:***

*Pass*

*Fail*

***Evaluator's Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_



OPERATIONS (CORE) – NFPA 472-2013, 5.1.2.2 (3) (E); 5.4.1 (4)

*DEMONSTRATING EMERGENCY DECONTAMINATION OF A RESPONDER*

STUDENT NAME:

SKILL SHEET # 4

**Skill Objective:** Demonstrating emergency decontamination of a responder.

**Skill Procedure:**

1. The candidate shall be given the instructions below before beginning this evaluation.
2. The candidate shall be given a hazardous materials scenario with possible contaminated victims (citizens, site workers, firefighters, etc.).
3. The candidate shall be provided with all equipment necessary to perform emergency decontamination.
4. The candidate shall wear appropriate PPE, including SCBA as necessary.
5. The candidate shall have 20 minutes to complete this skill.

The candidate given a scenario with possible contaminated victims, and all the equipment necessary, shall perform emergency decontamination wearing appropriate protective personal protective equipment, including SCBA as necessary.

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
1. Identify ways that personnel may become contaminated.	
2. Describes how the potential for secondary contamination determines the need for emergency decontamination.	
3. Identify the purpose of emergency decontamination.	
4. Identify the advantages and limitations of emergency decontamination.	
5. Describe the procedures for decontamination of a large number of people.	

***DEMONSTRATING EMERGENCY DECONTAMINATION OF A RESPONDER (CONTINUED ON NEXT PAGE)***



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

OPERATIONS (CORE) – NFPA 472-2013, 5.1.2.2 (3) (E); 5.4.1 (4)

DEMONSTRATING EMERGENCY DECONTAMINATION OF A RESPONDER

STUDENT NAME:

SKILL SHEET # 4

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
6. Identify considerations associated with the location of the emergency decontamination area.	
a) Verbally states that runoff must be controlled	
b) Verbally states that exposure to others must be minimized	
7. Demonstrate Emergency Decontamination	
a) Wears appropriate PPE per manufacturer’s recommendation.	
b) Directs victim(s) into emergency decontaminated area and floods with water.	
c) If victim is wearing a helmet/hat; has victim remove and floods with water	
d) If victim is wearing an SCBA; has victim release harness and remove SCBA leaving face piece in place	
e) Has victim remove contaminated clothing while maintaining continual wash.	
f) Directs victim to clean area	
g) Inform medical/EMS personnel of contaminant	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate’s Grade:***

***Pass***

***Fail***

***Evaluator’s Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_



MISSION SPECIFIC – NFPA 472-2013, 6.2.4.1, 6.2.4.1 (3), 6.2.5.1, 6.6.4.1(3) (H)  
USING PROTECTIVE CLOTHING AND RESPIRATORY PROTECTION AND OPERATING  
A REMOTE VALVE SHUTOFF

STUDENT NAME:

SKILL SHEET # 5

*This skill is to be used for agencies WITH or WITHOUT structural firefighting protective equipment.*

**Procedure:** The candidate shall don all personal protective equipment provided by the authority having jurisdiction including self-contained breathing apparatus. For fire service personnel, structural firefighting protective equipment will be worn, if available. For agencies without structural firefighting protective equipment, Tyvek coveralls or chemical-resistant splash suits should be used. Given a simulated hazardous materials spill or leak, the candidate shall safely and effectively activate a remote valve shutoff to stop the flow of product. For purposes of this skill from NFPA 472, there is no required time limit for this evolution to be completed. However, the evaluator has the option to determine if a candidate can complete within a reasonable amount of time to pass the skill.

**Instructions to the Candidate:** "You shall correctly don all personal protective equipment including SCBA within a reasonable amount of time. You shall correctly perform the appropriate action to activate a remote valve shutoff of a flowing product, given necessary equipment and wearing appropriate PPE. After performing remote valve shutoff, you shall correctly doff all personal protective equipment and document its use as having potential contact with a hazardous material."

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
1. Properly dons personal protective clothing	
2. Checks the SCBA air cylinder to visualize the amount of air in the bottle	
3. Opens the cylinder valve fully	
4. Places the unit securely on his or her back	
5. Adjusts both shoulder straps and the waist strap	
6. Dons the facepiece, equally tightening all straps and checks the facepiece seal	

**USING PROTECTIVE CLOTHING AND RESPIRATORY PROTECTION AND OPERATING A REMOTE VALVE SHUTOFF (CONTINUED ON NEXT PAGE)**



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

MISSION SPECIFIC – NFPA 472-2013, 6.2.4.1, 6.2.4.1 (3), 6.2.5.1, 6.6.4.1(3) (H)  
USING PROTECTIVE CLOTHING AND RESPIRATORY PROTECTION AND OPERATING  
A REMOTE VALVE SHUTOFF

STUDENT NAME:

SKILL SHEET # 5

<b><i>Items to be checked</i></b>	<b><i>Pass/Fail</i></b>
<i>If the candidate:</i>	
7. Checks the exhalation valve	
8. Dons helmet securely	
9. Connects the low pressure hose to regulator completely	
10. Ensures the mainline is fully open	
11. Dons gloves	
12. Has donned ALL protective clothing properly	
13. Experienced no unit malfunction due to pretest check	
14. Safely works in personal protective equipment	
a) Ensures all personnel involved in the control function are wearing appropriate personal protective equipment	
b) Approaches the remote valve shutoff from uphill and upwind if possible and avoids contact with the product	
c) Activates the remote valve shutoff to stop the flow of product	
15. Doffs ALL protective equipment properly	
16. Verbalizes and explains the proper documentation of the use of personal protective equipment having potential contact with hazardous materials	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate's Grade:***

***Pass***

***Fail***

***Evaluator's Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

MISSION SPECIFIC – NFPA 472-2013, 6.6.4.1, 6.6.4.1(3) (A) (B)  
PERFORMING CONTROL OPTIONS: ABSORPTION/ADSORPTION

STUDENT NAME:

SKILL SHEET # 6

**Procedure:** The candidate shall work as a member of a team and will be evaluated as such. Given a simulated hazardous materials spill or leak and sorbent materials (absorbants, absorbant pads, or absorption booms), the team shall safely and effectively apply an absorbent or adsorbent material to the spilled product.

**Instructions to the Candidate:** "You shall correctly perform the defensive control function of absorption or adsorption given necessary equipment and wearing appropriate PPE."

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
1. Ensures all personnel involved in the control function are wearing appropriate personal protective equipment	
2. Verbalizes isolating and evacuating the area according to ERG guidelines	
3. Approaches the spill from uphill and upwind if possible and avoids contact with the product	
4. Selects most appropriate sorbent material for the product	
5. Deploys sorbent material to effectively control product	
6. Verbalizes that contaminated material will be placed in appropriate containers for disposal	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate's Grade:***

*Pass*

*Fail*

***Evaluator's Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_



OPERATIONS (CORE) AND MISSION SPECIFIC – NFPA 472-2013, 5.1.2.2(3)(A) (B) (C)  
(D), 5.1.2.2(4) (A) (B), 5.5.2, 6.2.1.2, 6.6.1.2.2, 6.6.4.1, 6.6.4.1 (3) (C)

*ESTABLISHING ICS, PRESERVING EVIDENCE, PERFORMING CONTROL OPTIONS:  
DAMMING*

STUDENT NAME:

SKILL SHEET # 7

**Procedure:** The candidate shall work as a member of a team and will be evaluated as such. Given a simulated hazardous materials spill or leak and necessary equipment including a damming material such as soil, the team shall: (1) initiate the incident command system for the incident and assigns duties as required, (2) establish control procedures and zones for the incident, (3) identify the need for evidence preservation and establish means for evidence preservation, (4) safely and effectively construct a dam to reduce the flow of a spilled product, (5) successfully perform all tasks assigned, and (6) evaluate the status of control measures and communicate the status to appropriate person/agency.

**Instructions to the Candidate:** "You shall complete the following tasks: (1) initiate the incident command system for the incident and assigns duties as required, (2) establish control procedures and zones for the incident, (3) identify the need for evidence preservation and establish means for evidence preservation, (4) safely and effectively construct a dam to reduce the flow of a spilled product, (5) successfully perform all tasks assigned, and (6) evaluate the status of control measures and communicate the status to appropriate person/agency. "

<i><u>Items to be checked</u></i>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
1. Approaches the spill from uphill and upwind if possible and avoids contact with the product	
2. Initiates the incident command system for the incident and assigns duties as required	
3. Ensures all personnel involved in the control function are wearing appropriate personal protective equipment	
4. Establishes control procedures and zones for the incident	

*ESTABLISHING ICS, PRESERVING EVIDENCE, PERFORMING CONTROL OPTIONS:  
DAMMING (CONTINUED ON NEXT PAGE)*





ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

OPERATIONS (CORE) AND MISSION SPECIFIC – NFPA 472-2013, 5.1.2.2(3)(A) (B) (C) (D), 5.1.2.2(4) (A) (B), 5.5.2, 6.2.1.2, 6.6.1.2.2, 6.6.4.1, 6.6.4.1 (3) (C)

ESTABLISHING ICS, PRESERVING EVIDENCE, PERFORMING CONTROL OPTIONS:  
DAMMING

STUDENT NAME:

SKILL SHEET # 7

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
5. Identifies need for evidence preservation and establishes means for evidence preservation if necessary	
6. Constructs the dam in a location and manner that controls the spill	
7. Constructs a second dam a short distance from the first from the spill to control overflow	
8. Verbalizes that contaminated material will be placed in appropriate containers for disposal	
9. Successfully performs all tasks assigned	
10. Evaluates status of control measures and communications status to appropriate person/agency	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate's Grade:***

*Pass*

*Fail*

***Evaluator's Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

MISSION SPECIFIC – NFPA 472-2013, 6.6.4.1, 6.6.4.1(3) (D) (F)  
PERFORMING CONTROL OPTIONS: DIKING, DIVERSION

STUDENT NAME:

SKILL SHEET # 8

**Procedure:** The candidate shall work as a member of a team and will be evaluated as such. Given a simulated hazardous materials spill or leak and necessary equipment including a diking and diversion material such as soil, the team shall safely and effectively construct a dike to control the flow of a spilled product.

**Instructions to the Candidate:** "You shall correctly perform the defensive control function of diking and diversion given necessary equipment and wearing appropriate PPE."

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
1. Ensures all personnel involved in the control function are wearing appropriate personal protective equipment	
2. Verbalizes isolating and evacuating the area according to ERG guidelines	
3. Approaches the spill from uphill and upwind if possible and avoids contact with the product	
4. Constructs the dike in a location and manner that controls and directs the spill to the desired location	
5. Verbalizes that contaminated material will be placed in appropriate containers for disposal	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate's Grade:***

*Pass*

*Fail*

***Evaluator's Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_



MISSION SPECIFIC – NFPA 472-2013, 6.6.4.1, 6.6.4.1(3) (E)  
PERFORMING CONTROL OPTIONS: DILUTION

STUDENT NAME:

SKILL SHEET # 9

**Procedure:** The candidate shall work as a member of a team and will be evaluated as such. Given a simulated hazardous materials spill or leak and necessary equipment including a charged hoseline, the team shall safely and effectively apply water to a spilled product to dilute the effects of the material to a safe concentration.

**Instructions to the Candidate:** "You shall correctly perform the appropriate action of diluting a spilled hazardous material, given necessary equipment and wearing appropriate PPE."

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
1. Ensures all personnel involved in the control function are wearing appropriate personal protective equipment	
2. Verbalizes isolating and evacuating the area according to ERG guidelines	
3. Approaches the spill from uphill and upwind if possible and avoids contact with the product	
4. Confines the product to a given area by using diking and natural terrain	
5. Inquires about the water reactivity of the material	
6. Applies water appropriately to dilute the material without splashing or overflowing the confinement area	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate's Grade:***

*Pass*

*Fail*

***Evaluator's Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

MISSION SPECIFIC – NFPA 472-2013, 6.6.4.1, 6.6.4.1(3) (G)  
PERFORMING CONTROL OPTIONS: RETENTION

STUDENT NAME:

SKILL SHEET # 10

**Procedure:** The candidate shall work as a member of a team and will be evaluated as such. Given a simulated hazardous materials spill or leak and necessary equipment including a including plastic sheeting or a tarp, the team shall safely and effectively construct a retention area to contain the flow of a spilled product.

**Instructions to the Candidate:** "You shall correctly perform the appropriate action of creating a retention area to contain the flow of a spilled hazardous material, given necessary equipment and wearing appropriate PPE."

<i><b>Items to be checked</b></i>	<i><b>Pass/Fail</b></i>
<i>If the candidate:</i>	
1. Ensures all personnel involved in the control function are wearing appropriate personal protective equipment	
2. Approaches the spill from uphill and upwind if possible and avoids contact with the product	
3. Selects the best location for a retention area	
4. Constructs a retention area by digging a hole or using a depression in the ground and lining the area with plastic sheeting or a tarp	
5. Uses soil to build a wall and hold the plastic in place on three sides of the depression, leaving the uphill side open to allow the product to flow	
6. Monitors for the site effectiveness	

*Candidate MUST successfully master each step listed to pass this skill.*

*Candidate's Grade:*

*Pass*

*Fail*

*Evaluator's Signature:* \_\_\_\_\_

*Date:* \_\_\_\_\_



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

MISSION SPECIFIC – NFPA 472-2013, 6.6.4.1, 6.6.4.1(3) (I)  
PERFORMING CONTROL OPTIONS: VAPOR DISPERSION

STUDENT NAME:

SKILL SHEET # 11

**Procedure:** The candidate shall work as a member of a team and will be evaluated as such. Given a simulated hazardous materials spill or leak and necessary equipment including a charged hoseline, the team shall safely and effectively disperse vapors away from certain areas or material by use of pressurized hose streams.

**Instructions to the Candidate:** "You shall correctly perform the appropriate action of hazardous material vapor dispersion, given necessary equipment and wearing appropriate PPE."

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
1. Ensures all personnel involved in the control function are wearing appropriate personal protective equipment	
2. Verbalizes isolating and evacuating the area according to ERG guidelines	
3. Approaches the spill from uphill and upwind if possible and avoids contact with the product	
4. Selects a location to safely perform vapor dispersion	
5. Properly applies water through vapor cloud to disperse vapors	
6. Monitors application for effectiveness and adjusts nozzle pattern and distance for the spill as needed	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate's Grade:***

*Pass*

*Fail*

***Evaluator's Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_



MISSION SPECIFIC – NFPA 472-2013, 6.6.4.1, 6.6.4.1 (1), 6.6.4.1 (3) (J)  
PERFORMING CONTROL OPTIONS: VAPOR SUPPRESSION

STUDENT NAME:

SKILL SHEET # 12

**Procedure:** The candidate shall work as a member of a team and will be evaluated as such. Given a simulated hazardous materials spill or leak and necessary equipment including the appropriate nozzle and foam eductor combination, foam concentrate and hoselines, the team shall assemble a foam hoseline and safely and effectively suppress vapor production from the hazardous material.

**Instructions to the Candidate:** "You shall correctly assemble a foam stream and perform the appropriate action of hazardous material vapor suppression, given necessary equipment and wearing appropriate PPE."

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
1. Ensures all personnel involved in the control function are wearing appropriate personal protective equipment	
2. Verbalizes isolating and evacuating the area according to ERG guidelines	
3. Verbalizes that ERG guidelines are followed to determine the type of foam needed for situation (non-polar solvent or polar solvent)	
4. Checks the eductor and nozzle to make sure that they are compatible	
5. Ensures the foam concentration matches the eductor percentage rating	
6. Attaches eductor to hose of proper size	
7. Attaches attack hoseline and nozzle to the discharge end of eductor	
8. Opens the foam bucket and places eductor suction hose into the foam	
9. Opens nozzle to ensure generation of foam	

**PERFORMING CONTROL OPTIONS: VAPOR SUPPRESSION (CONTINUED ON NEXT PAGE)**



ONTARIO OFFICE OF THE FIRE MARSHAL AND EMERGENCY MANAGEMENT

HAZARDOUS MATERIALS/WEAPONS OF MASS  
DESTRUCTION OPERATIONS (NFPA 472-2013)

PRACTICAL SKILLS

MISSION SPECIFIC – NFPA 472-2013, 6.6.4.1, 6.6.4.1 (1), 6.6.4.1 (3) (J)  
PERFORMING CONTROL OPTIONS: VAPOR SUPPRESSION

STUDENT NAME:

SKILL SHEET # 12

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
10. Approaches the spill from uphill and upwind if possible and avoids contact with the product	
11. Demonstrates the application of foam in an indirect method	
a) Bounces agent off walls or other obstructions (bank-down)	
b) Applies the agent in front of the material and “rolls” the agent onto the material (roll-on)	
c) Gently lobs the agent onto the material (rain-down)	
12. Verbalizes maintaining the integrity of foam blanket to prevent breach	

***Candidate MUST successfully master each step listed to pass this skill.***

***Candidate’s Grade:***

***Pass***

***Fail***

***Evaluator’s Signature:*** \_\_\_\_\_

***Date:*** \_\_\_\_\_



MISSION SPECIFIC – NFPA 472-2013, 6.2.4.1 (4)

*DEMONSTRATING PROCEDURES TO SUPPORT TECHNICAL DECONTAMINATION  
OF A VICTIM*

STUDENT NAME:

SKILL SHEET # 13

**Procedure:** The candidate shall work as a member of a team and will be evaluated as such. The student, wearing full protective equipment including SCBA and provided with equipment to create a decontamination containment pool, a charged hoseline, and rescue mannequin dressed in clothing, shall set up a pool for decontaminating the victim.

**Instructions to the Candidate:** "You shall correctly assemble a decontamination containment pool using the equipment supplied and properly perform decontamination of the simulated victim."

<u>Items to be checked</u>	<i>Pass/Fail</i>
<i>If the candidate:</i>	
1. Creates a decontamination containment pool for victim	
2. Ensures all personnel are wearing appropriate PPE	
3. Removes victim from contaminated area without contacting the product	
4. Places victim in pool	
5. Immediately washes contaminated clothing and victim's exposed skin with flooding water	
6. Simulates stripping clothing from victim	
7. Performs a cycle of head-to-toe rinse, wash, and rinse	
8. Removes victim from pool and transfers to EMS	

*Candidate MUST successfully master each step listed to pass this skill.*

*Candidate's Grade:*

*Pass*

*Fail*

*Evaluator's Signature:* \_\_\_\_\_

*Date:* \_\_\_\_\_