



HAZARDOUS MATERIALS OPERATIONS

PRACTICAL SKILLS CERTIFICATION EVALUATION PACKET (NFPA Standard 472, 2013 Edition)

**Department of Public Safety
Alaska Fire Standards Council
5700 E. Tudor Road
Anchorage, Alaska 99507
(907)269-5052**

www.firestandards.alaska.gov

Revised June 2014

V13-1

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

HAZARDOUS MATERIALS OPERATIONS PRACTICAL SKILLS JOB PERFORMANCE REQUIREMENTS			
(NFPA 472, 2013 Edition)			
Skill Sheet #	NFPA Section #	Tasks	Initial Certification Skill Requirement: 1 Mandatory 2 Random
HMO 1	5.1.2.2, 5.5.2, 6.6.3.1, 6.2.1.2	Scenario- Hazardous Materials Spill	Mandatory (1 <i>or</i> 2)
HMO 2	5.1.2.2(3)(e), 5.4.1(4), 6.2.4.1	Scenario- Hazardous Materials Fire	Mandatory (1 <i>or</i> 2)
HMO 3	5.1.2.2(3)(e), 5.4.1(4), 6.2.4.1	Emergency Decontamination	Random
HMO 4	6.2.4.1	Don/Doff PPE and Respiratory Protection	Random
HMO 5	6.2.1.2, 6.2.4.1	Maintain PPE and SCBA	Random
HMO 6	6.6.1.2, 6.6.3.1, 6.6.4.1	Defensive Control Measures	Random
HMO 7	6.6.3.1; 6.6.4.1	Application of Foam	Random

Skill Sheet Packet Instruction

Purpose of the Skill Sheets

All skills listed in this packet are consistent with the 2013 edition of the [NFPA 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents](#), 2013 edition. The Alaska Fire Standards Council (AFSC) provides these skill sheets as the basis for Hazardous Materials Operations testing and certification.

For certification purposes, the final skill examination will consist of a series of mandatory skill stations and a selection of random skills from this packet. Candidates will be required to successfully complete selected practical skills during final certification examinations at the Operations level.

Description & Use

1. These skills sheets are designed for use by the Training Officer and Hazardous Materials Operations candidate. Use of this packet throughout an accredited training program will assist in verifying candidate competency and completion of the [Hazardous Materials Training Record](#).
2. For eligibility to complete the final certification examination, a candidate must demonstrate competency in all skills during training and satisfactorily compete all items on the Hazardous Materials Operations Training Record document.
3. This packet is designed to encompass the requisite skills for Hazardous Materials Operations and many of these skill sheets are used for final testing and certification. Accreditation Managers/Training Officers and Hazardous Materials Operations course instructors should utilize this evaluation packet during a course to prepare candidates for the certification exam. These skills sheets should be given to every Hazardous Materials Operations candidate at the beginning of a training course and used throughout the course for ongoing evaluation by the instructor. For a candidate's final skills evaluation, she or he must successfully perform each skill while being evaluated on performance competency by an AFSC examination representative.
4. The final skills examination will consist of skills selected from this packet. Skills are selected from the mandatory and random skills categories. This packet contains a list of all mandatory and randomly selected skills that are used for the final examination.
5. Random skill stations will be selected using a test management system within the AFSC office. The random skill stations are selected just prior to the test date. The Certifying Officer will notify candidates which skills they will be required to complete at the start of the practical skills portion on the date of the examination.
6. The completion of the Hazardous Materials Operations Training Record establishes a candidate's eligibility to test. This document must be fully completed and signed by the Accreditation Manager/Training Officer or designee for each candidate before a candidate can begin the final skills examination. The Hazardous Materials Operations Training Record and the practical skills evaluation sheets shall become a permanent part of the candidate's local training record, and this information shall be kept on file in accordance with local fire department procedures.

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Grading Criteria

1. It is expected that all of the listed skill sheet elements will be taught and evaluated by the Hazardous Materials Operations instructor throughout a course. During the final skills exam the candidate must be prepared to perform all the skills listed in this packet. There are no specific critical points designated within the practical skill sheets, and the Certifying Officer (CO) will require the candidate to repeat an individual practical skill station if *all* of the listed skill items on a selected sheet are not completed by the candidate.
2. This packet contains skill requirements that involve the demonstration of hazardous materials skills within "simulated" scenarios related to fire ground activities. When applicable, skill sheets specifically describe when simulated fire conditions are permitted for certification testing.
3. There are critical performance items that must be followed for satisfactory performance. Examples of *unsatisfactory* performance can include:
 - a. Exceeding limitations: time, safety, and equipment limitations
 - b. Inadequate/insufficient personal protective equipment
 - c. Lack of skill accuracy and task completion as defined on the skill evaluation sheet
 - d. Poor judgment in skill performance (i.e.- wrong application of tool or equipment or safety violation)
 - e. Failure to appropriately apply related knowledge or skill requirements
 - f. Not competent in the specified task or skill steps
 - g. Outcome of the specified task is in doubt (i.e.- incorrectly performed or did not accomplish skill evaluation criteria)
 - h. Need for Evaluator intervention (i.e.- imminent health or safety risk to candidate or others)
 - i. Failure to adhere to basic safety principles or guidelines

Artificialities of Training and Testing

Training and testing for Hazardous Materials Operations can only approximate on-the-job activities of a firefighter. There are certain artificialities to training and testing that the candidate must be able to adapt to. Candidates must be aware that actual fire ground situations cannot be completely duplicated during final examination scenarios. For the best possible outcome during final skills examination, Hazardous Materials Operations instructors must prepare the candidates to competently perform the skills listed in this packet throughout a training course.

Final Skills Evaluation

The AFSC designated Certifying Officer (CO) conducts the final evaluation and utilizes the practical skills evaluation sheets during the final examination process. Throughout the final examination, the CO has the overall test site authority and is required to perform his or her duties as outlined in the [Certification Policy Manual](#).

For preparation of the final examination the designated CO must coordinate with the Accreditation Manager/Training Officer, or designee, to ensure an adequate test site location is available. The Accreditation Manager/Training Officer is responsible for preparation of all test site equipment/materials and arranging designated evaluators for the date of the practical examination. The CO must verify that all required elements are adequate for testing and will approve all designated Evaluators. Designated Evaluators shall receive training appropriate for the test site and are required to complete an [Evaluator Code of Ethics Compliance](#) agreement before testing begins.

The CO shall verify completion of the final examination packet.

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Additional Notes:

1. During the final practical examination it is expected that an appropriate uniform, or full personal protective equipment (PPE), shall be worn unless otherwise indicated within the skill evaluation sheet.
2. During some scenarios a candidate may be instructed to perform other firefighter/hazardous materials tasks not directly related to the specific skill sheet evaluation being tested. It is expected that the candidate shall perform all related skills correctly.
3. Some skills may include a time limit. An Evaluator may use a digital or analog watch/stopwatch for final skills evaluation. Prior to the start of the practical examination, the CO must inspect and approve all timing devices used during final skills evaluations.
4. Some skills require that equipment or documentation be used within the final skills examination. Unless otherwise indicated, it is permissible for the candidate to prepare or assemble the required equipment or paperwork at any time, provided that this does not interfere with the core skill, task, or evolution.
5. Candidates must be prepared to complete skills under a variety of conditions. Training and skills practice is often done during optimum conditions, but candidates must be prepared to adapt to changing conditions that can occur in actual fire ground situations. The Evaluator ultimately determines if the candidate has met the criteria specified on the skill(s) being evaluated.
6. For final examination, the performance of a skill, task, or evolution is not required to be done in the exact order of the steps (as outlined on the skill sheet), unless it is critical to a particular task. For example, a person must don turnout gear before donning an SCBA.
7. Some scenarios may involve skills that must be performed as a team. During final skills examinations Evaluators and candidates must be cognizant that each team member is evaluated separately to ensure individual criteria is met. An individual candidate may be required to repeat a task if they do not satisfy the skill sheet requirements if working as a member of a team.
8. Some skills may require that a candidate verbalizes information about a particular task or procedure. In such cases, any question(s) from the Evaluator to the candidate must be limited to those that satisfy the criteria listed on the skill sheet, and a question cannot exceed the scope the Hazardous Materials Operations requirements.

Hazardous Materials Operations Final Written and Practical Examinations

Following is a brief outline of the reference materials and documents that are used for a Hazardous Materials Operations final examination:

Hazardous Materials Operations Written Material References

- a. NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, 2013 edition
- b. Text (any one of the following)
 - Jones and Bartlett, *Hazardous Materials Awareness and Operations*, 1st Edition
 - IFSTA, *Hazardous Materials for First Responders*, 4th Edition
- c. Additional Reference
 - DOT Emergency Response Guide Book, 2012 Edition

Hazardous Materials Operations Practical Skills Evaluation References

- a. NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, 2013 edition
- b. Hazardous Materials Operations Practical Skills Evaluation Sheets (*this packet*)

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Final Examination Steps

- a. *[Hazardous Materials Training Record](#) review (*this must be completed and signed off by the Accreditation Manager/Training Officer or designee prior to the date of the final examination and reviewed by the CO to ensure all elements are complete.*)
- b. Certifying Officer reviews and signs candidate Application for Certification
- c. Candidate completes the written examination administered by the CO
- d. Candidate completes the practical examination administered by the CO.
- e. Certifying Officer reviews completed Evaluator skill sheets and transfers information to the [Practical Examination Reporting Form](#) (PERF)
- f. Written exam, PERF, and signed application are forwarded to AFSC.
- g. AFSC Hazardous Materials Operations certificate is issued upon successful completion of the written and practical exam (*within approximately 30 days of test date*)

**Note: The candidate's completed Training Record shall be placed in the candidate's local training file in accordance with fire department procedures*

Acknowledgements

The Alaska Fire Standards Council would like to acknowledge the assistance of the International Fire Service Accreditation Congress and its members and numerous Alaska fire service subject matter experts who have provided reference and support throughout the revision process.

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Candidate:	Date:
-------------------	--------------

NFPA 472- 2013 Ed.

PRACTICAL SKILL REQUIREMENTS

HMO 1

STANDARD: NFPA 472: 5.1.2.2, 5.5.2, 6.6.3.1, 6.2.1.2	SKILL AREA: Hazardous Materials Spill/Leak Control
---	---

TASK: Given a scenario involving hazardous materials, the candidate shall implement a response in accordance with SOP/SOG; evaluate progress to safely meet objectives; survey the incident to identify containers involved; collect hazard and response information; and communicate the status of response through chain of command.

PERFORMANCE OUTCOME: The candidate shall 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 all tasks correctly.

EQUIPMENT: Emergency Response Guidebook (ERG), Material safety Data Sheet (MSDS), and local SOP's/SOG's.

CONDITIONS: Given an hazardous materials scenario, the candidate shall:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Establish and enforce scene control procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Establish means of evidence preservation, as indicated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Initiate incident management system according to National Incident Management System (NIMS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Identify the type of container and the product involved and determine material behavior based on available information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Determine the minimum personal protective equipment required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Implement product control measures as indicated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Evaluate the status of the actions taken in accomplishing the response objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Communicate the status of the response in accordance with local policy and procedure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Notify the incident commander and other response personnel about critical emergency conditions at the incident, as indicated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluator:		<i>Retest Evaluator 1:</i>	
		<i>Retest Evaluator 2:</i>	

Comments:

_____ *Certifying Officer Name* _____ *Date*

_____ *Certifying Officer Signature*

<p align="center"><u>Overall Skill Sheet Result:</u></p> <p align="center">Pass (P): <input type="checkbox"/> Fail (F): <input type="checkbox"/></p>

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Candidate:	Date:
-------------------	--------------

NFPA 472- 2013 Ed.

PRACTICAL SKILL REQUIREMENTS

[HMO 2](#)

STANDARD: NFPA 472: 5.1.2.2, 5.5.2, 6.6.3.1, 6.2.1.2	SKILL AREA: Hazardous Materials Fire
TASK: Given a scenario involving hazardous materials, the candidate shall implement a response in accordance with SOP/SOG; evaluate progress to safely meet objectives; survey the incident to identify containers involved; collect hazard and response information; and communicate the status of response through chain of command.	
PERFORMANCE OUTCOME: The candidate shall 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 all tasks correctly.	
EQUIPMENT: Emergency Response Guidebook (ERG), Material safety Data Sheet (MSDS), and local SOP's/SOG's.	
CONDITIONS: Given an hazardous materials scenario, the candidate shall:	

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Establish and enforce scene control procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Establish means of evidence preservation, as indicated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Initiate incident management system according to National Incident Management System (NIMS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Identify the type of container and the product involved and determine material behavior based on available information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Determine the minimum personal protective equipment required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Implement product control measures as indicated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Evaluate the status of the actions taken in accomplishing the response objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Communicate the status of the response in accordance with local policy and procedure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Notify the incident commander and other response personnel about critical emergency conditions at the incident, as indicated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluator:		<i>Retest Evaluator 1:</i>	
		<i>Retest Evaluator 2:</i>	
Comments:			

<i>Certifying Officer Name</i>	<i>Date</i>
<i>Certifying Officer Signature</i>	

<u>Overall Skill Sheet Result:</u>
Pass (P): <input type="checkbox"/> Fail (F): <input type="checkbox"/>

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Candidate:	Date:
-------------------	--------------

NFPA 472- 2013 Ed.

PRACTICAL SKILL REQUIREMENTS

HMO 3

STANDARD: NFPA 472: 5.1.2.2(3)(e), 5.4.1(4), 6.2.4.1	SKILL AREA: Emergency Decontamination
---	--

TASK: Demonstrate the ability to perform emergency decontamination on a contaminated person.

PERFORMANCE OUTCOME: The candidate shall be able to remove a simulated contaminated person from the contaminated area, wash the contaminated person as necessary, remove contaminated clothing, and coordinate transporting the contaminated person to a facility of higher care.

EQUIPMENT: Personal protective equipment, self-contained breathing apparatus (SCBA)/respiratory protection, water supply, hoses, hose tools and appliances, various nozzles: hand line, fog/solid stream combination, brushes, containment area, product name and Emergency Response Guidebook (ERG), portable radio, and local SOP's/SOG's.

CONDITIONS: Given a simulated contaminated person and a scenario, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Identify the contaminated person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Remove contaminated person from hot zone/contaminated area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Flood contaminated person with water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Remove contaminated person's helmet (if worn)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Remove contaminated person's respiratory protection (if worn)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Remove contaminated person's clothing while maintaining continuous washing: a) remove gloves and coat b) remove pants and boots c) remove hood d) remove SCBA mask	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Move contaminated person to clean environment and/or ambulance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Communicate contaminant information to ambulance and/or hospital personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluator:		<i>Retest Evaluator 1:</i>	
		<i>Retest Evaluator 2:</i>	

Comments:

_____ *Certifying Officer Name* _____ *Date*

_____ *Certifying Officer Signature*

<u>Overall Skill Sheet Result:</u>
Pass (P): <input type="checkbox"/> Fail (F): <input type="checkbox"/>

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Candidate:	Date:
-------------------	--------------

NFPA 472- 2013 Ed.

PRACTICAL SKILL REQUIREMENTS

HMO 4

STANDARD: NFPA 472: 6.2.4.1	SKILL AREA: Don/Doff PPE and Respiratory Protection
TASK: Demonstrate the ability to don personal protective equipment (PPE) with respiratory protection, work in a contaminated area (simulated), and doff the equipment provided to support mission-specific tasks	
PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to correctly don PPE and respiratory protection, work in a contaminated area, exit the contaminated area, and doff gear in accordance with AHJ procedure.	
EQUIPMENT: Personal protective equipment, SCBA, and decontamination materials according to Authority Having Jurisdiction (AHJ), and local SOP's/SOG's..	
CONDITIONS: Given a simulated hazardous materials environment, the candidate shall demonstrate the ability to complete all task steps.	

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Verify that personal protective equipment and SCBA is ready for service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Correctly don chemical protective clothing (Level B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Correctly don respiratory protection.,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Verify all personal protective clothing correctly is in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Enter contaminated area and perform work assignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Exit contaminated area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Complete decontamination and doffing procedures in accordance with local AHJ policy and procedure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Remove respiratory protection and place all equipment in a ready state for reuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluator:		<i>Retest Evaluator 1:</i>	
		<i>Retest Evaluator 2:</i>	
Comments:			

_____ *Certifying Officer Name* _____ *Date*

_____ *Certifying Officer Signature*

<u>Overall Skill Sheet Result:</u>
Pass (P): <input type="checkbox"/> Fail (F): <input type="checkbox"/>

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Candidate:	Date:
-------------------	--------------

NFPA 472- 2013 Ed.

PRACTICAL SKILL REQUIREMENTS

HMO 5

STANDARD: NFPA 472: 6.2.1.2, 6.2.4.1	GENERAL SKILL: Maintenance: Respiratory Protection Equipment
TASK: Conduct the maintenance, testing, inspection, storage and documentation procedures for personal protective equipment so that equipment is clean and maintained according to manufacturer or departmental guidelines, maintenance is recorded, and equipment is placed in a ready state or reported otherwise.	
PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to select the correct equipment for cleaning and inspection, follow manufacturer and departmental guidelines, and complete recording and reporting procedures.	
EQUIPMENT: SCBA/respirator ensemble, service tags, cleaning supplies, and maintenance log book/record, and local SOP's/SOG's.	
CONDITIONS: Given a fire station or other adequate location, the candidate shall demonstrate the ability to:	

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Wash SCBA/respirator with manufacturer recommended cleaner/disinfectant and rinse completely with water and air dry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Clean equipment with damp cloth or according to department policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Check straps and backpack assembly (SCBA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Check condition and hydrostatic test date of cylinder (SCBA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Turn cylinder valve on fully and compare that both gauges are within 100 psi (low pressure) to 200 psi (high pressure) of each other (SCBA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Check regulator operation by connecting to face piece and breathing (SCBA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Check face piece and exhalation valve by inhaling & exhaling (SCBA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Check by-pass operation and ensure by-pass is in the off position after testing (SCBA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Check low pressure alarm while bleeding the air line (SCBA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Return all straps, valves, and components back to ready state (SCBA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Check the air cylinder is in off position and at least 90% to full (SCBA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Remove from service and notify supervisor if irregularities are found	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	Complete reports and documentation pertaining to equipment use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluator:		Retest Evaluator 1:	
		Retest Evaluator 2:	

Comments:

_____ *Certifying Officer Name* _____ *Date*

_____ *Certifying Officer Signature*

<u>Overall Skill Sheet Result:</u>
Pass (P): <input type="checkbox"/> Fail (F): <input type="checkbox"/>

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Candidate:	Date:
-------------------	--------------

NFPA 472- 2013 Ed.

PRACTICAL SKILL REQUIREMENTS

[HMO 6a](#)

STANDARD: NFPA 472: 6.6.1.2, 6.6.3.1, 6.6.4.1	SKILL AREA: Product Control Measures
TASK: Given examples of hazardous materials/WMD incidents, the operations level responder assigned to perform product control shall identify the options for each response objective and shall meet the requirements as prescribed by the AHJ:	
PERFORMANCE OUTCOME: The candidate will successfully demonstrate each of the abilities identified within the checklist.	
EQUIPMENT: Personal protective equipment, self-contained breathing apparatus (SCBA), shovels/hand tools, materials that can be used for absorption, damming, diking, diversion, retention, dispersion and suppression, tarps/salvage cover, sandbags, fire hose, various nozzles: hand line, fog/solid stream combination, hose tools and appliances, and water supply. Other equipment/materials may be used based on local resources, portable radio, and local SOP's/SOG's.	
CONDITIONS: The candidate shall complete the following:	

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
	Certifying Officer shall select two (2) of the following tasks for final certification examination:						
1.	<input type="checkbox"/> Absorption (e.g.: absorbent pads, saw dust, diatomaceous earth, gelling agent)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	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.	<input type="checkbox"/> Damming (e.g.: sand, dirt, salvage cover, absorbent pads, sewer-storm drain plugs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	a. Use common, available materials.						
	b. Avoid contact with the hazardous material.						
	c. Ensure dam is not breached.						
3.	<input type="checkbox"/> Diking (e.g.: dirt, sand bags, absorbent pads, clay)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	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.						
4.	<input type="checkbox"/> Dilution (e.g.: applied water stream to dilute substance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	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.	<input type="checkbox"/> Diversion (e.g.: shovels or high pressure water streams, sand bags)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	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.						

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Candidate:	Date:
-------------------	--------------

NFPA 472- 2008 Ed.

PRACTICAL SKILL REQUIREMENTS

HMO 6b

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
6.	<input type="checkbox"/> Retention (e.g.: salvage cover catch-all basin, earthen dams, floating confinement boom, temporary patches on containers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	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.	<input type="checkbox"/> Vapor Dispersion (e.g.: water streams, fans)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	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.	<input type="checkbox"/> Remote valve shut-off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	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:		<i>Retest Evaluator 1:</i>	
		<i>Retest Evaluator 2:</i>	
Comments:			

<i>Certifying Officer Name</i>	<i>Date</i>
<i>Certifying Officer Signature</i>	

<u>Overall Skill Sheet Result:</u>
Pass (P): <input type="checkbox"/> Fail (F): <input type="checkbox"/>

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

Candidate:	Date:
-------------------	--------------

NFPA 472- 2013 Ed.

PRACTICAL SKILL REQUIREMENTS

HMO 7

STANDARD: NFPA 472: 6.6.3.1; 6.6.4.1	GENERAL SKILL: Application of Foam
TASK: Using class B foam or simulated 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 spill or fire involving hazardous materials.	
PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to properly apply firefighting foam or a vapor suppressing agent. The agent application should be sufficient to prevent re-ignition, and provide safety to the team at all times.	
EQUIPMENT: Personal protective equipment, SCBA (CO to determine if on air), pump apparatus, attack line, various nozzles: hand line, fog/solid stream combination, foam proportioner/educter, foam compatible nozzle, foam concentrate (<i>or simulated foam product</i>), hose tools and appliances, and water supply, portable radio , and local SOP's/SOG's..	
CONDITIONS: Given a hazardous materials scenario, the candidate shall demonstrate the ability to:	

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Approach the spill or fire from uphill and upwind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Coordinate the attack team's advancement toward the fire so that a smooth and safe approach is maintained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Set nozzle to correct pattern (<i>and GPM flow, if applicable</i>)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Use correct application procedures to effectively control vapors or fire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Demonstrate application of a foam blanket over a fuel spill using the following techniques:						
	a) Roll on method	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Bank down method	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Rain down method	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Apply properly proportioned foam to the surface of the fuel and create and maintain a foam blanket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Extinguish the fire and prevent re-ignition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Maintain team protection with a foam stream	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Face the hazard until the team has completely retreated to a safe haven	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluator:		Retest Evaluator 1:	
		Retest Evaluator 2:	

Comments:

_____ Date _____

Certifying Officer Name

Certifying Officer Signature

<u>Overall Skill Sheet Result:</u>
Pass (P): <input type="checkbox"/> Fail (F): <input type="checkbox"/>

PRACTICAL SKILLS TESTING CORRELATION MAP

HAZARDOUS MATERIALS OPERATIONS PRACTICAL SKILLS JOB PERFORMANCE REQUIREMENTS

(NFPA 472, 2013 Edition)

Skill Sheet #	NFPA Section #	Tasks	Initial Certification Skill Requirement: 1 Mandatory 2 Random
<u>HMO 1</u>	5.1.2.2, 5.5.2, 6.6.3.1, 6.2.1.2	Scenario- Hazardous Materials Spill	Mandatory (1 <i>or</i> 2)
<u>HMO 2</u>	5.1.2.2(3)(e), 5.4.1(4), 6.2.4.1	Scenario- Hazardous Materials Fire	Mandatory (1 <i>or</i> 2)
<u>HMO 3</u>	5.1.2.2(3)(e), 5.4.1(4), 6.2.4.1	Emergency Decontamination	Random
<u>HMO 4</u>	6.2.4.1	Don/Doff PPE and Respiratory Protection	Random
<u>HMO 5</u>	6.2.1.2, 6.2.4.1	Maintain PPE and SCBA	Random
<u>HMO 6</u>	6.6.1.2, 6.6.3.1, 6.6.4.1	Defensive Control Measures	Random
<u>HMO 7</u>	6.6.3.1; 6.6.4.1	Application of Foam	Random

NFPA 472 2013 Edition Changes to Haz Mat Ops Skill Sheets

Specific Skill Sheet Changes from 2008 to 2013 Editions:

- Reformatted sheet numbering for consistency with AFSC format
- Hyperlinked [Specific Job Performance Requirement](#) with individual skill sheets. Individuals sheet number hyperlinked to jpr chart.
- Removed multiple skill sheets from practical finals as indicated for correlation requirements under accreditation guidelines.
- Added a separate equipment and facility requirement list for use in course planning process.

ALASKA HAZ MAT OPERATIONS PRACTICAL SKILLS EVALUATION PACKET

HMO Testing Equipment List			Related Skill Sheet(s)
<input type="checkbox"/>	1	Cleaning supplies (PPE, hose, ladders, SCBA)	4, 5,
<input type="checkbox"/>	2	Containment area/tarp/portable children's swimming pool	3,
<input type="checkbox"/>	3	Current Emergency Response Guide Book (1 per student)	1, 2, 3,
<input type="checkbox"/>	4	Decon Brushes	3, 4,
<input type="checkbox"/>	5	Department Standard Operating Procedures/Standard Operating Guidelines (SOP's/SOG's). Accessible to membership	1-7,
<input type="checkbox"/>	6	Extra bunker gear/PPE (Decon)	4,
<input type="checkbox"/>	7	Fire hose (attack 1 ½ or larger); 400' with 2 nozzles	3, 6, 7,
<input type="checkbox"/>	8	Fire hose (supply 2 ½ or larger); 400'	3, 6,
<input type="checkbox"/>	9	Foam Agent (5-gallons Class B [can be simulated or expired foam])	7,
<input type="checkbox"/>	10	Foam Appliances	7,
<input type="checkbox"/>	11	Foam Proportioner (apparatus mounted or in line eductor)	7,
<input type="checkbox"/>	12	Full PPE/bunkers for each candidate	3, 4, 6, 7,
<input type="checkbox"/>	13	Full Self Contained Breathing Apparatus (SCBA)/supplied air respirator (SAR) protection for participants	3, 4, 5, 6, 7,
<input type="checkbox"/>	14	Hose tools and appliances	3,6,7
<input type="checkbox"/>	15	MSDS File	1, 2,
<input type="checkbox"/>	16	Portable radio	3, 6, 7
<input type="checkbox"/>	17	Salvage tarps/covers (assortment)	6,
<input type="checkbox"/>	18	Service Tags and Maintenance log book/record	5,
<input type="checkbox"/>	19	Traffic/scene control devices	
<input type="checkbox"/>	20	Materials that can be used for absorption, damming, diking, diversion, retention, dispersion and suppression.	6,
<input type="checkbox"/>	21	Various hand tools (Including forcible entry tools)	6,
<input type="checkbox"/>	22	Shovels	6,
<input type="checkbox"/>	23	Sandbags	6,
<input type="checkbox"/>	24	Various nozzles: hand line, fog/solid stream, combination	3, 6, 7

HMO Facility Checklist			Related Skill Sheet(s)
<input type="checkbox"/>	1	Active hydrant for water supply/other water source	3, 6, 7,
<input type="checkbox"/>	2	Pump apparatus with water tank/source	3, 6, 7,