

Training and Evaluation Outline Report

Status: Approved

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Task Number: 05-PLT-5405

Task Title: Perform Hazardous Materials (HAZMATs) Incident Operations

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the MSCoE, Fort Leonard Wood, MO foreign disclosure officer. This training product can be used to instruct international military students from all approved countries without restrictions.

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	ATP 5-19 (Change 001 09/08/2014 78 Pages)	RISK MANAGEMENT http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp5_19.pdf	Yes	No
	ERG2008	Department of Transportation Emergency Response Guidebook.	Yes	No
	NFPA	National Fire Protection Association, Fire Protection Guide on Hazardous Materials, Eighth Edition	Yes	No
	NFPA 472HB02	Hazardous Materials Response Handbook, 5th Edition	Yes	Yes
	NFPA 473 2013 ED	National Fire Protection Association, Standard for Competencies for EMS Personnel Responding to Hazardous Materials Incidents, 2013 Ed	Yes	No
	TM 3-34.30	Firefighting	Yes	No

Conditions: The fire and emergency services (F&ES) team is notified of a suspected hazardous materials (HAZMAT) incident within the team's area of operations (AO). The element has all assigned personnel and equipment and a unit standing operating procedure (SOP) for responding to fires and other emergency situations.

Note: The Commander must still determine at what level of training they would want the element to perform. Crawl, walk or run. This can only be determined after consideration as to the units training level.

The Commander prior to evaluating an element in the conduct of the task must determine if it will be conducted in a Live, Virtual, or Constructive environment, additionally it must also be determined which condition as described below that the element will conduct the task. The selection made for this task is at a trained level of proficiency. The commander must determine which of the environments below will best suit the unit and the proficiency level at which the unit is. When conducting crawl or walk level training units should not increase the intensity until the unit has achieved the standards and then unit trainers should include variables that increase proficiency in all conditions.

Note: The condition statement for this task is written assuming the highest training conditions reflected on the Task Proficiency matrix required for the evaluated unit to receive a "fully trained" (T) rating.

Note: Condition terms definitions:

Dynamic Operational Environment: Three or more operational and two or more mission variables change during the execution of the assessed task. Operational variables and threat Tactics, Techniques, and Procedures (TTPs) for assigned counter-tasks change in response to the execution of Blue Forces (BLUFOR) tasks.

Complex Operational Environment: Changes to four or more operational variables impact the chosen friendly COA/mission. Brigade and higher units require all eight operational variables of Political, Military, Economic, Social, Infrastructure, Information, Physical environment, and Time (PMESII-PT) to be replicated in varying degrees based on the task being trained.

Single threat: Regular, irregular, criminal or terrorist forces are present.

Hybrid threat: Diverse and dynamic combination of regular forces, irregular forces, and/or criminal elements all unified to achieve mutually benefiting effects.

Some iterations of this task should be performed in MOPP 4.

Standards: The engineer F&ES team responds to the site of the reported HAZMAT incident and performs HAZMAT incident operations, resulting in the containment, control or termination of the incident. The element performs the task in accordance with National Fire Protection Agency (NFPA) codes and standards, without causing personnel injuries or equipment loss, while rescuing victims without causing further injury and limiting the negative impact on the environment. Note: Leaders are defined as the Commander, Executive Officer, First Sergeant, Operations Sergeant, Platoon Leaders, Platoon Sergeants, Squad Leaders, and Team Leaders.

Live Fire Required: No

Objective Task Evaluation Criteria Matrix:

Plan and Prepare		Execute						Assess	
Operational Environment	Squad & Platoon	Training Environment (LV/C)	Training/Authorized % of Leaders Present at	% of Soldiers Present at	External Eval	% Performance Measures 'GO'	% Critical Performance Measures 'GO'	% Leader Performance Measures 'GO'	Task Assessment
Dynamic (Single Threat)	Night	IAW unit CATS statement.	>=85%	>=80%	Yes	>=91%	All	>=90%	T
			75-84%			80-90%		80-89%	T-
Static (Single Threat)	Day		65-74%	75-79%	No	65-79%	<All	<=79%	P
			60-64%	60-74%		51-64%			P-
			<=59%	<=59%		<=50%			U

Remarks: None

Notes: 1. Task steps marked with ** will only be performed by personnel who hold HAZMAT Technician or higher level certification.

2. All required references and technical manuals will be provided by the local command.

Safety Risk: High

Task Statements

Cue: None

DANGER

Do not attempt to take on an incident if crews do not have the proper hazmat equipment. Failure to comply may result in death or permanent injury.

Leaders have an inherent responsibility to conduct Risk Management to ensure the safety of all Soldiers and promote mission accomplishment.

WARNING

Ensure that manning requirements for certified on scene personnel are fulfilled in accordance with NFPA standards and guidelines. Failure to comply may result in death or permanent injury.

Risk management is the Army's primary decision-making process to identify hazards, reduce risk, and prevent both accidental and tactical loss. All Soldiers have the responsibility to learn and understand the risks associated with this task.

CAUTION

The crew will only perform rescue operations if their safety is assured.

Identifying hazards and controlling risks across the full spectrum of Army functions, operations and activities is the responsibility of all Soldiers.

Performance Steps and Measures

NOTE: Assess task proficiency using the task evaluation criteria matrix.

NOTE: Asterisks (*) indicate leader steps; plus signs (+) indicate critical steps.

STEP/MEASURE	GO	NO-GO	N/A
+ 1. The fire alarm communications center (FACC) operator gathers as much information as possible concerning the incident, to include location, estimated size, estimated number of victims and nature of the incident.			
+* 2. The senior fire officer (SFO) applies size-up factors from initial report to FACC.			
+* 3. The SFO supervises the following actions in preparation of responding to the incident:			
+ a. Personnel don personal protective equipment (PPE).			
+ b. Personnel conduct buddy checks after donning PPE.			
c. Team accounts for all members before leaving the fire station.			
+ d. The driver takes the quickest route and positions vehicle upwind of the incident.			
+ 4. The SFO of the first arriving element takes charge of the scene.			
a. Observes the incident at a distance (preferably with binoculars) and radios in an initial report to the FACC.			
+ b. Sets up a command post (CP) and determines objectives as soon as possible.			
+ c. Sets up control zones and restricts access to the incident, allowing essential personnel only.			
Note: At this point, all crew members should be in full turnout gear and prepared to don their self-contained breathing apparatus (SCBA).			
+ d. Determines decontamination plan for personnel and equipment before allowing access to hot zone.			
+ e. Maintains accountability of all personnel at the site.			
+ f. Establishes communications on site for personnel responding to the HAZMAT incident.			
(1) Uses dedicated radio frequency free from other radio traffic.			
(2) Uses hand and light signals as secondary communications means.			
(3) Uses audible warning device that can be heard by incident responders to warn of imminent hazard conditions that could endanger personnel.			
+ g. Determines level of PPE required to protect skin and respiratory system.			
+ h. Requires medical monitoring before entry into hot zone, during operations, and post exit from hot zone.			
+ 5. **The team attempts to identify the HAZMAT.			
+ a. Looks for placards or labels to identify the contents.			
b. Obtains the bill of lading or material safety data sheets (MSDSs) from the facility manager or carrier, if available.			
+ 6. **The SFO determines the following, after the HAZMAT has been identified:			
+ a. Determines if the released material can be stopped or contained with the initial response teams.			
+ b. Determines method for mitigating the hazard, whether through physical or chemical methods.			
+ c. Requests additional elements, and prepares to expand the control zones and/or evacuate the area, if needed.			
d. Determines if a rescue operation is needed.			
CAUTION			
Because rescue is an offensive operation it should only be performed by HAZMAT Tech certified personnel.			
+ 7. **The crew performs personnel rescue operations.			
+ 8. The crew mitigates the HAZMAT incident per the SFO guidance.			
+ 9. **The SFO supervises the operation.			
a. Reevaluates the situation continuously.			
b. Coordinates the attack or containment.			
+ c. Ensures no rescue personnel remain in the contaminated area for longer than 20 minutes.			
d. Coordinates work and rest cycles.			
e. Coordinates vehicle staging.			
+ f. The SFO radios situation reports to FACC.			
g. Requests additional resources as required, such as additional engineer F&ES teams, military police or medical personnel.			
+ 10. The SFO terminates operations once the HAZMAT incident is controlled or stopped.			
+ 11. The engineer F&ES team conducts overhaul operations.			
+ 12. The engineer F&ES team performs field decontamination procedures as directed by the SFO.			
+* 13. The SFO conducts termination debriefing.			

Step Number	Task Number	Title	Proponent	Status
	052-249-1102	Perform Fire Pump Operations	052 - Engineer (Individual)	Approved
	052-249-1103	Don Protective Clothing	052 - Engineer (Individual)	Approved
	052-249-1111	Load a Hose	052 - Engineer (Individual)	Approved
	052-249-1112	Conduct Hose Lays	052 - Engineer (Individual)	Approved
	052-249-1113	Advance a Hose Line	052 - Engineer (Individual)	Approved
	052-249-1114	Operate a Nozzle	052 - Engineer (Individual)	Approved
	052-249-1124	Calculate Pump Operating Pressure	052 - Engineer (Individual)	Approved
	052-249-1131	Perform Rescue Carries	052 - Engineer (Individual)	Approved
	052-249-1137	Operate a Self-Contained Breathing Apparatus	052 - Engineer (Individual)	Approved
	052-249-1147	Perform Hazmat Operations at the Hazmat Operational Level	052 - Engineer (Individual)	Approved
	052-249-1149	React to Various Fire Behaviors	052 - Engineer (Individual)	Approved
	052-249-1162	Perform Hose Load Finishes	052 - Engineer (Individual)	Approved
	052-249-1164	Control a Flammable Gas Cylinder Fire	052 - Engineer (Individual)	Approved
	052-249-1165	Extinguish an Ignitable Liquid Fire	052 - Engineer (Individual)	Approved
	052-249-2101	Test a Fire Hose	052 - Engineer (Individual)	Approved
	052-249-2108	Respond to a Structural Fire	052 - Engineer (Individual)	Approved
	052-249-2113	Manage a Personnel Accountability System	052 - Engineer (Individual)	Approved
	052-249-2118	Respond to an Ordnance Incident	052 - Engineer (Individual)	Approved
	052-249-2123	Respond to a Hazmat Incident	052 - Engineer (Individual)	Approved
	052-249-3101	Maintain Records and Reports	052 - Engineer (Individual)	Approved
	052-249-3104	Supervise a Structural Firefighting Operation	052 - Engineer (Individual)	Approved
	052-249-3107	Perform a Size-Up of a Hazmat Incident	052 - Engineer (Individual)	Approved
	052-249-3120	Supervise a Firefighting Crew on an Ordnance Incident	052 - Engineer (Individual)	Approved
	052-249-4116	Perform Incident Command of a Hazmat Incident	052 - Engineer (Individual)	Approved
	052-250-9103	Develop the Environmental Appendix to the Engineer Annex	052 - Engineer (Individual)	Approved
	052-717-9101	Evaluate The Impact Of Army Operations On The Environment	052 - Engineer (Individual)	Approved

Supporting Drill(s): None

Supported AUTL/UJTL Task(s):

Task ID	Title
ART 6.6.1.7	Provide Fire and Emergency Services

TADSS

TADSS ID	Title	Product Type	Quantity
No TADSS specified			

Equipment (LIN)

LIN	Nomenclature	Qty
HA4032	Test Set Self Contained Breathing Apparatus (SCBA)	1
T56383	Truck Utility Expanded Capacity Enhanced 4x4: M1165A1	1
T82180	Truck: Tactical Firefighting 8x8 Heavy EXP MOV	1
M31997	M1158 Truck: HEMTT Based Water Tender	1
R68044	Radio Set: AN/VRC-90F(C)	1

Materiel Items (NSN)

NSN	LIN	Title	Qty
No materiel items specified			

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card. .

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. .