

**Report Date:** 25 Apr 2012

**Summary Report for Individual Task**

**031-627-4103**

**Determine the level of Personal Protective Equipment (PPE) at the Incident Command Level**

**Status: Approved**

---

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

DESTRUCTION NOTICE: None

**Condition:** As an incident commander, given the Emergency Response Guidebook (ERG), National Institute for Occupational Safety and Health (NIOSH) pocket guide to chemical hazards and a known or unknown HazMat incident in various facility or transportation situations to chemical hazards. This task should not be trained in MOPP.

**Standard:** Determine the level of personal protective equipment (PPE) at the incident command level by performing the following IAW NFPA 472:

- a. Identifying the levels of PPE,
- b. Identifying the issues impacting PPE selection,
- c. Describing the safety considerations for PPE,
- d. Identifying the stresses that affect PPE users.

**Special Condition:** None

**Special Standards:** None

**Special Equipment:**

**MOPP:** Never

<b>Task Statements</b>
------------------------

**Cue:** None

<b>DANGER</b>
None

<b>WARNING</b>
None

<b>CAUTION</b>
None

**Remarks:** None

**Notes:** None

## Performance Steps

### 1. Identify the levels of Personal Protective Equipment (PPE).

a. Level A: the highest available level of skin, respiratory, and eye protection. This level requires a fully encapsulating suit constructed of material that is compatible with the substances involved and a self-contained breathing apparatus (SCBA).

b. Level B: the same level of respiratory protection but less skin protection than Level A. This level is the minimum recommended for initial site entries where the hazards have not yet been identified. This level requires chemical-resistant clothing and a SCBA.

c. Level C: the same level of skin protection as the Level B but a lower level of respiratory protection. This level requires chemical-resistant clothing and air purifying respirator.

d. Level D: No respiratory protection and minimum skin protection. This level requires normal work clothes.

### 2. Identify the issues that impact PPE selection.

a. Degradation of chemical-protective clothing (CPC) can be either chemical or physical. The result of degradation is an increased likelihood that a hazardous material will permeate and penetrate the garments, thus endangering the health of the responder.

(1) Chemical degradation can be minimized by avoiding unnecessary contact with chemicals and by undergoing effective decontamination procedures. The garments should be chosen based on their compatibility with the chemicals involved in an incident and breakthrough times consistent with their expected use.

(2) Physical degradation might occur when the garment rubs against a rough surface. The wearer should recognize the physical limitations and make every effort to avoid circumstances that may cause material to be damaged.

b. Penetration is the movement of hazardous material through the suit closures which include zippers, buttonholes, seams, flaps, and other design features of CPC. Hazardous materials can also penetrate through cracks or tears in the suit fabric.

c. Permeation is the chemical movement on a molecular level through intact material. Different fabrics have different resistance levels to chemical permeation and will absorb chemicals over a period of time.

### 3. Describe safety considerations for personnel working in PPE.

a. Provide backup personnel, wearing the same level of PPE, to assist the entry team in an emergency.

b. Monitor personnel for the effects of heat.

c. Provide an on-scene rehabilitation program to replenish fluids and allow for rest and recovery.

### 4. Identify the stresses that can affect users of PPE.

a. Physiological stress: persons wearing CPC usually experience a loss of dexterity and mobility, heat stress and heat exhaustion. The higher the level of protection, the greater the loss. Wearing CPC increases the likelihood of heat stress and heat exhaustion.

b. Psychological: familiarity with wearing and working in CPC reduces any mental anxiety associated with garment wear. Thus, frequent drills are essential.

(Asterisks indicates a leader performance step.)

**Evaluation Preparation:** Setup: In a real or simulated HazMat incident, provide the Soldier with the items listed in the condition statement and direct the Soldier to determine PPE requirements.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Identified the levels of PPE.			
a. Level A.			
b. Level B.			
c. Level C.			
d. Level D.			
2. Identified the issues that impacted PPE selection.			
a. Degradation.			
b. Penetration.			
c. Permeation.			
3. Described the safety considerations for personnel working in PPE.			
a. Provided backup personnel in the same level of PPE as the entry team.			
b. Monitored personnel for the effects of heat.			
c. Provided an on-scene rehabilitation program.			
4. Identified the stresses that can affect users of PPE.			
a. Physiological stress.			
b. Psychological stress.			

**Supporting Reference(s):**

Step Number	Reference ID	Reference Name	Required	Primary
	ERG 2008	Emergency Response Guidebook 2008: A Guidebook For First Responders During The Initial Phase Of A Dangerous Goods/Hazardous Materials Transportation Incident.	Yes	Yes
	NFPA 472 2008 ED	National Fire Protection Association, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, 2008 Ed	No	No
	NIOSH 2005-149	National Institute of Occupational Safety & Health (NIOSH) Guide to Chemical Hazards	Yes	Yes

**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 FM 3-34.5 Environmental Considerations and GTA 05-08-002 Environmental-Related Risk Assessment.

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET 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, NBC Protection, FM 3-11.5, CBRN Decontamination. In a training environment, leaders must perform a risk assessment IAW FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 Composite Risk Management Worksheet 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, NBC Protection, FM 3-11.5, CBRN Decontamination.

**Prerequisite Individual Tasks :** None

**Supporting Individual Tasks :** None

**Supported Individual Tasks :** None

**Supported Collective Tasks :**

<b>Task Number</b>	<b>Title</b>	<b>Proponent</b>	<b>Status</b>
03-1-6592	Establish A CBRN Incident Response Operations Center	03 - CBRN (Collective)	Approved

**ICTL Data :**

<b>ICTL Title</b>	<b>Personnel Type</b>	<b>MOS Data</b>
CBRN SLC, 2011	Enlisted	MOS: 74D, Skill Level: SL4