

# LAO PDR NATIONAL UXO/MINE ACTION STANDARDS (NS)



## Chapter Eighteen Personnel Protective Equipment (PPE)

National Regulatory Authority for  
the UXO/Mine Action Sector in Lao PDR

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## **Personal Protective Equipment (PPE)**

### **1. Introduction**

The needs to reduce risk and to provide a safe working environment are fundamental principles of UXO/mine action management. Risk reduction involves a combination of safe working practices and operating procedures, effective supervision and control, appropriate education and training, equipment of inherently safe design, and the provision of effective Personal Protective Equipment (PPE) and clothing.

The Lao PDR National Regulatory Authority (NRA) is the authority responsible for safety and efficiency in mine action in Lao PDR. It is responsible for developing the requirements for PPE used in UXO/mine action in Lao PDR and for ensuring compliance with these requirements.

### **2. Scope**

This chapter covers the requirements for the PPE to be used in UXO/mine action operations in Lao PDR.

The requirements for PPE included in this chapter of NS only covers PPE for UXO clearance not mine clearance. The requirements for PPE for mine clearance operations are included in **Chapter 12 of NS, Mine Clearance Operations**.

### **3. Statutory Requirements for the Provision of PPE**

Article 42 of the **Labour Law (Amended), 27 December 2006** covers protective measures for labour and working conditions. The provisions of this Article, amongst other things, cover the provision, free of charge, of personal safety equipment and clothing.

### **4. Responsibilities of Clearance Organisations**

Clearance organisations carrying out UXO clearance operations that require the use of PPE, are to establish and maintain Standard Operating Procedures (SOPs) that detail the minimum requirements for the use of PPE on their clearance operations. The SOPs are to be in accordance with the requirements of this chapter of NS. SOPs are to also cover:

- a. Training in the proper use, maintenance and storage of PPE.
- b. The regular inspection of PPE for serviceability.
- c. The policy on the replacement of damaged or defective PPE.

Technical specifications, provided by the manufacturer, for PPE to be used on UXO clearance operations are to be included in documentation presented by clearance organisations for accreditation. Samples of PPE may also be inspected during any on-site assessment carried out during the accreditation process.

Any proposed changes to approved PPE are to be advised to the NRA and approval for the replacement PPE obtained before it is introduced into operations.

### **5. Minimum Requirements for PPE for Clearance Operations**

There is no requirement to wear PPE for UXO clearance conducted in Lao PDR provided the known or assessed hazards associated with the task do not include mines. This includes UXO clearance carried out by Explosive Detection Dog (EDD) teams.

### 5.1. Disposal of White Phosphorus (WP)

Personnel employed raking WP sites after WP disposal operations should wear the following **minimum** PPE and protective clothing:

- a. Cotton based long trousers and long-sleeved shirts.
- b. Enclosed footwear.
- c. Eye protection.
- d. Headwear, floppy hat or similar made of cotton.

When WP disposal operations involve multiple items then an **IMAS 10.30 S&OH Personal protective equipment** compliant fragment proof vest should also be worn.

Personnel involved in handling damaged, corroded or leaking WP UXO are to wear full body fire resistant suits.

### 5.2. Operating Hand-Held Mechanical Vegetation Cutting Equipment

Safety glasses, ear protection and boots are to be worn/used by personnel operating hand-held mechanical vegetation cutting equipment.

## 6. PPE for Specialist Operations

Clearance organisations are to obtain the express agreement of the NRA for any UXO clearance operations involving items known or suspected of containing liquid propellant, Fuel Air Explosive (FAE) or lethal or damaging chemical agents.

If such operations are necessary and authorised, the minimum requirements for PPE are as follows:

- a. Liquid Propellant. PPE used is to be in accordance with the minimum requirements stated in **TNMA 09.30/03 Guidance on liquid propellant fuelled systems**.
- b. FAE. PPE used is to be in accordance with the minimum requirements stated in **TNMA 09.30/04 Fuel Air Explosive (FAE) systems**.
- c. Lethal and Damaging Chemical Agents. The PPE is to provide complete overall protection from inhaled or skin-contact vapour and cuts from sharp fragments. The minimum PPE to be provided is:
  - (1) Inner cotton gloves.
  - (2) Outer heavy PVC gloves of industrial quality.
  - (3) Respirator.
  - (4) Gas and liquid resistant over suit and overboots.

## 7. Protective Clothing

Clearance organisations are to provide to their personnel, at no cost to the individual, adequate clothing to protect them from the normal operating conditions at their worksites and from the elements.

## **8. Hearing Protection**

Clearance organisations are to provide hearing protection to personnel exposed to intense or protracted levels of noise, provided this does not compromise safety.

## **9. Management of PPE and Protective Clothing**

Routine inspections of PPE and protective clothing are to be carried out by clearance organisations. This is to ensure that these items continue to provide the required level of protection and that the condition of the PPE or protective clothing does not affect the safety and efficiency of operations. The requirements for such inspections are to be included in organisations SOPs.

Routine inspections are to cover both the serviceability of PPE and protective clothing and the correct wearing of it. During these inspections, special attention is to be made to the conditions of protective visors and the serviceability of clothing.

When damaged or defective PPE or protective clothing is identified, clearance organisations are to ensure that these items are replaced prior to the individual user being permitted to continue working.