LMAS 10.50 Annex A

EXPLOSIVES LICENCES

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Note:
This document is current at the date shown on this page. The Local Mine Action Standards (LMAS) are subject to regular revision, so users should ensure that they are using the latest version of each document in the standards. The most recent versions of LMAS are available with SMACO office of Rabouni.

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1. Introduction

In the event of an explosive accident or incident within an explosive storage facility, there is a potential hazard to personnel, adjacent storage sites, inhabited buildings and other civilian property. To minimise this hazard, facilities shall be sited at prescribed distances from other buildings and facilities. These distances are known as Quantity (Safety) Distances and they limit the permissible Net Explosive Quantity (NEQ), which may be stored.

Any building that contains, or is intended to contain explosives, is considered to be a Potential Explosion Site (PES); any building, structure, facility or place of assembly that is hazarded by a PES is considered to be an Exposed Site (ES).

2. Quantity (Safety) Distances

Quantity (Safety) Distances are measured from the nearest point of the PES to the nearest point of the ES; distances shall be measured along a straight line without regard to barricades. The factors that affect a Quantity (Safety) Distance are: **a.** Hazard Divisions

b. NEQ at the PES

c. PES and ES building Construction

d. Effective Barricades around PES

e. The functional use of the ES

The 3 main governing Quantity (Safety) Distances that concern us are:

a. Inhabited Buildings Distance

b. Public Traffic Route Distances

c. Inter-magazine Distances

3. Safety Distances

3.1 Inhabited Buildings Distances

These distances are the minimum permissible distances between a PES and inhabited buildings or assembly areas. The distances are intended to prevent serious structural damage by flame, blast or projections to ordinary types of inhabited buildings, thereby making consequential death or serious injury to their occupants unlikely. Personnel in the open, for example on playing fields, would not suffer direct injury from the blast itself.

3.2 Public Traffic Route Distances

These distances are the minimum permissible distances between a PES and Public Traffic Routes. Since the risks presented by Public Traffic Routes are so diverse, two basic alternatives are provided dependent upon the volume of traffic over a period of one day, the use of the full inhabited Public Traffic Route shall be used for traffic volume exceeding 3,000 vehicles per day and the reduced Public Traffic Route Distance shall be used for traffic volume below 3,000 vehicles per day. The Term Public Traffic Route covers roads, railways and navigable waterways.

3.3 Inter-magazine Distances

These distances are the minimum permissible distances between a PES and other Explosive Storage Facilities. These Distances are intended to provide specified degrees of protection to the explosives at the ES, but the degree of protection is highly dependent upon factors such

as the sensitiveness of explosives, the type of ammunition, the type of packaging and the type and construction of the building at the PES or the ES or both.

4. Licencing

4.1 Explosive Limit Licence (ELL)

An ELL is a formal document that outlines the maximum permissible NEQ that any given Explosive Storage Facility may store. It also details those ES"s that have been taken into consideration when actually calculating the NEQ and what the limiting factor ES actually was.

4.2 ELL Approval

The SMACO is required to draft ELLs for both SMACO and Mine Action Organisations explosive storage facilities within their area of responsibility. The following applies: Full details on the proposed Explosive Storage Facility, including a map of the general area, a schematic diagram of the area detailing both the PES and ES and the actual licence itself shall be forwarded to the SMACO for approval. On approval by the SMACO a serial number shall be annotated.

There may be some locations where some ES are deemed as being acceptable risks e.g. Mine Action Organisation base locations etc., this shall be considered on a case by case basis but if considered acceptable, all relevant information shall still be annotated on the ELL.

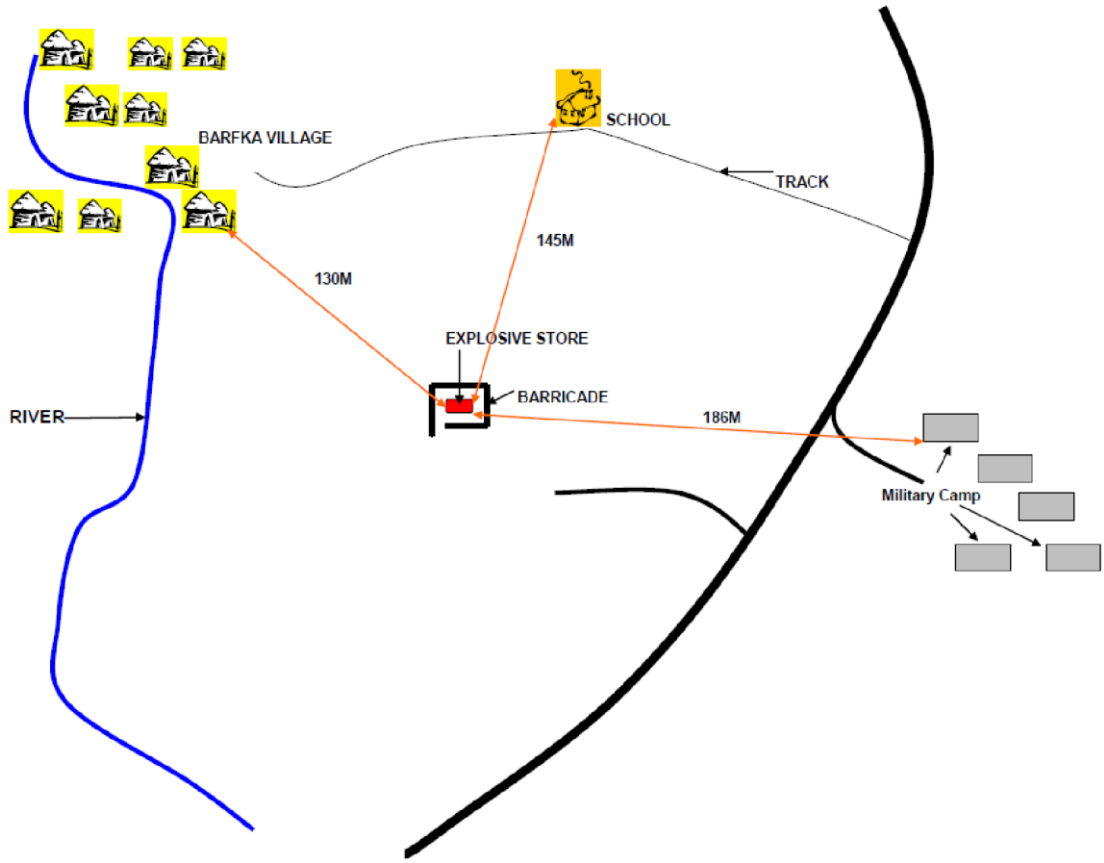

Figure 1: Example of an Explosive Limit Licence Safety Trace (map)

Explosive Limit Licence for Barka Village Explosive Storage Facility

	INHABITED BUILDINGS DISTANCE		PUBLIC TRAFFIC ROUTE DISTANCE		INTER-MAGAZINE DISTANCE	
	FACTOR (M)	PERMITTED NEQ (KG)	FACTOR (M)	PERMITTED NEQ (KG)	FACTOR (M)	PERMITTED NEQ (KG)
PES	BARKA VILLAGE 130 M	136 KGS	ROAD 65 M	272 KGS	N/A	N/A
PES	SCHOOL 145 M	182 KGS				
PES	MILITARY CAMP 186 M	454 KGS				

Barka Village is the Limiting Factor; the maximum permissible NEQ is therefore 136 KGS.

NOTES
1. The Explosive Storage Facility is deemed to be adequately barricaded in accordance with IMAS 10.50.
2. The UNMAO and access road has not been included in the NEQ calculation they are deemed to be an "Acceptable Risk".
3. The river has not been included in the NEQ calculation as it is not a navigable waterway.
4. Less than 3,000 vehicles traffic the road per day.
5. The storage of ammunition and explosives within the facility will be in full accordance of the LMAS and IMAS 10.50.
6. Fire Prevention Procedures are to be in accordance with IMAS 10.50 Annex E.
7. A copy of this licence and associated diagram is to be displayed at the Explosive Storage Facility.
8. The ELL will be reviewed after a period of 12 months.

Accepted by: LMAA Ops/QA Officer Signature: Date:	Approved by: LMAA Chief of Operations Signature: Date:

Figure 2: Example of an Explosive Limit Licence (ELL)