

LibMAS 09.10/1

Annex C

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CLEARANCE OF VEGETATION

Responsible National entity:

Libyan Mine Action Centre (LibMAC)
mandated by the Ministry of Defence (MOD)

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NOTE:

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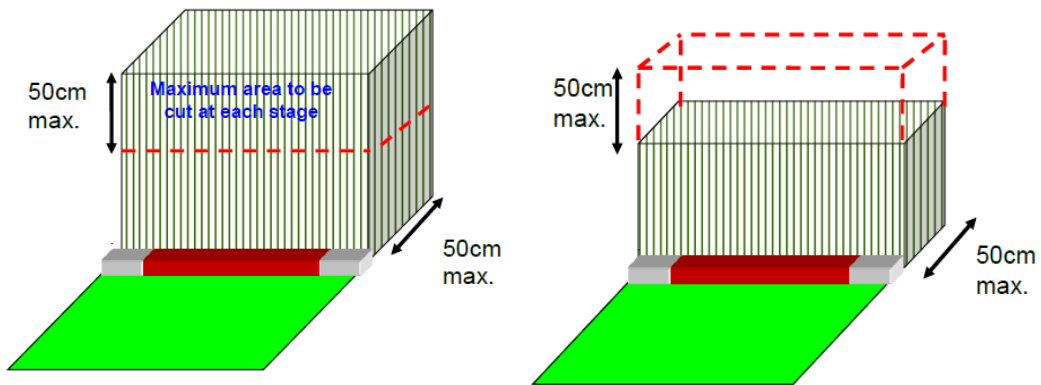
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1. Introduction

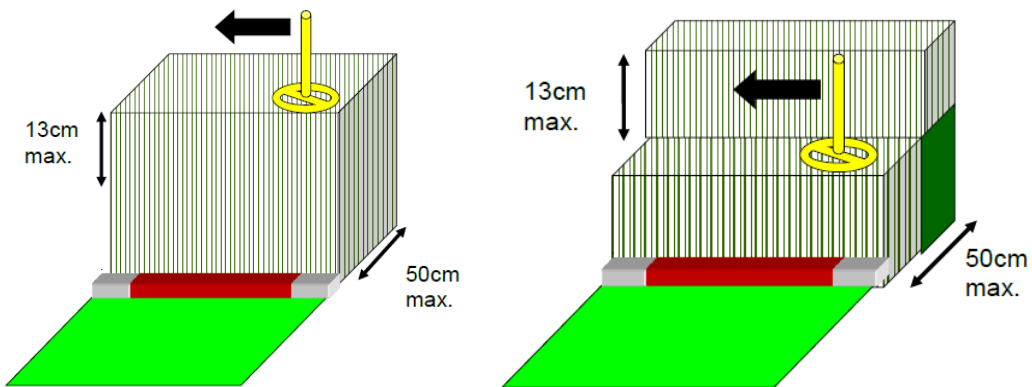
- 1.1 Vegetation is a common obstacle confronted during demining operations as it impedes the ability to search for mines/ERW visually, with instruments and can impact on safety, i.e. when traversing the ground and through concealment of mines/ERW.
- 1.2 This Annex details the following procedures for the clearance of vegetation during demining operations:
 - a. Vegetation removal using hand tools such as shears and secateurs.
 - b. Burning of vegetation in unclear areas.

2. Vegetation Removal Using Hand Tools

- 2.1 When there is a requirement to cut vegetation to aid the clearance process and ensure the safe movement of personnel then the following shall be adhered to:
 - a. The Deminer shall face towards the immediate area to be cleared.
 - b. The Deminer shall conduct a visual inspection of the vegetation for any signs of mines/ERW or other hazards prior to cutting the vegetation.
 - c. If any mines/ERW or other hazards are seen then, the Deminer should place a hazard a red hazard marker shall be placed a minimum of 10 cm before the item, inside the clear area and the supervisory person (i.e. Site Supervisor or Team Leader) shall be informed.
 - d. To avoid overstretching into the uncleared area during the cutting procedure, vegetation shall be cut up to a maximum distance of 50 cm forward from the front of the clearance lane (e.g. base stick) and across the complete width of the lane, incorporating an overlap to the sides of a minimum of 10 cm and maximum distance of 50 cm.
 - e. The clearance of vegetation shall be conducted in a safe, controlled method, avoiding any disturbance of vegetation outside the immediate area to be cut.
 - f. If necessary, one hand shall be used to hold the tree, branch, or clump of vegetation, while the other uses the cutting tool.
 - g. The vegetation shall be cut systematically from the top downwards in a safe and controlled manner at a maximum of 50 cm segments at a time.
 - h. The vegetation shall not be pulled prior to it being cut.
 - i. A sufficient amount of vegetation shall be removed to enable to a visual search and to the maximum detector search height if there is a requirement to search the ground using a detector.
 - j. The tools should not make contact with the ground during the cutting process.
 - k. Large / heavy vegetation shall not be allowed to fall into uncleared areas.
 - l. Cut vegetation which may impede clearance shall be placed in a cleared area, ensuring that it does not become an obstacle.
 - m. The vegetation cutting process shall be regularly supervised.
 - n. The detector may be used to search the vegetation prior to it being cut and any signals shall be carefully investigated.
 - o. When using the detector to search the vegetation, it shall be swept in systematic manner, avoiding undue disturbance of the vegetation.
 - p. When used in conjunction with the detector search, the length of vegetation cut from top to bottom may be adjusted in accordance with the capability of the detector, i.e. reduced from 50 to 13 cm (as per the clearance depth).



Figures 1 and 2: Example - Cutting vegetation in 50 cm stages



Figures 3 and 4: Example - Cutting in 20 cm stages

3. Burning of Vegetation in Uncleared Areas

- 3.1 Burning of uncleared areas may be conducted by Mine Action Organisations in order to remove vegetation to facilitate mine clearance and battle area clearance (BAC) operations, generally when manual or mechanical removal of vegetation is impractical or unsafe.
- 3.2 The following shall be adhered to:
- Prior to commencing burning, the Mine Action Organisation concerned shall notify local authorities and gain authorisation from LibMAC.
 - Caution shall be exercised by the Mine Action Organisation and the burning shall be controlled in order to prevent the undesired burning of other areas and cause an unacceptable risk to the local population.
 - The results from burning must be considered, such as, the altered state and instability of mines and ERW.
 - The burn shall be conducted by a suitably qualified person, e.g. Site Supervisor or EOD Officer and the burning procedure, including the method of initiation shall be detailed in the Mine Action Organisation SOP.

4. Prior to conducting burning

- 4.1 Gain authorisation for burning from the LibMAC. Burning should be included in the Implementation Plan.
- 4.2 If possible, notify local authorities including the local emergency fire services.
- 4.3 Ensure that the landowner agrees to the burning which should include a written statement.
- 4.4 Ensure that the landowner agrees to the burning which should include a written statement.
- 4.5 If necessary, coordinate activities with other agencies.
- 4.6 If necessary, construct a firebreak to prevent the fire from spreading.
- 4.7 Ensure that adequate precautions are taken to extinguish any small fires in cleared areas. (e.g., fire extinguishers, sand, water).
- 4.8 Calculate the blast and fragmentation safety distance depending on the threat (i.e. mines/ERW) and post sentries accordingly.

5. During burning

- 5.1 Monitor the burning procedure from a safe distance.
- 5.2 Record any detonations and other relevant occurrences.
- 5.3 Immediately report any pertinent incidents and accidents to the LibMAC.

6. Post burning

- 6.1 Inform the LibMAC and relevant authorities on completion of burning.
- 6.2 Ensure that the burning has ceased prior to leaving the Site.
- 6.3 Allow a 24-hour soak time, from the last signs of smoke before conducting demining operations in the burned area.