6. MANUAL CLEARANCE

1. Site Preparation

All designated working sites will have vehicle parking area, minimum two-meter wide access lanes, rest area, latrines, medical station, metal collection point, demolition area, metal-free test area for the testing of metal detectors, briefing area, control point and storage area. These will be clearly defined. All these areas within a work site and outside of a known contaminated or suspected area will be checked, verified and marked prior to use to ensure that they are free of mines/UXO.

A survey will be conducted prior to any clearance operation; details are covered in a separate chapter contained in these standards. A lane will be established as a baseline for mine/UXO clearance. This line will be clearly marked and will create the basis from which working/clearing lanes will progress. Uncleared areas must be clearly marked.

Prior to conducting clearance operations, the team leader will carry out a reconnaissance, if possible, together with the survey team leader that conducted the initial survey.

2. Mine Clearance Techniques

Manual demining drills are to be based on the employment of two-man teams. One man will be working in the working lane; the other one will be at minimum distance of twenty-five meters. The personnel are to rotate these functions at predetermined interval. Deminers, working in clearance lanes, are to be supervised and supported continuously. Full details of demining drills are to be contained in SOPs.

Manual demining techniques will differ based on specific projects, such as house clearance, dense vegetation, conductive soils or ground with a high metallic content etc. However, tripwire procedures, prodder and metal detector drills will always be followed. Clearance lanes will always be one-meter wide only and each lane will overlap by 10cm. Only horizontal cutting tools will be used for cutting vegetation. Prodding will start a hand span (minimum 15 cm) back from the edge of any metal detector signal on the width 30cm. If a metal detector is not used, prodding will cover 10 cm on either side of the one-meter lane and forward to a maximum of 5 cm in each progressive move forward.

When a metal detector is used, all signals will be investigated and all metal will be removed from the ground and placed at the metal collection point. When prodding, all objects, located by prodder, will be investigated.

The metal detector should be checked for effectiveness and sensitivity as per manufacture's manual.

3. Demolitions

The only method of disposing of mines or unexploded ordnance is explosive demolition. The recommended firing system will be governed by circumstances. Electric initiation should be used whenever required for safety reasons. During demolitions, safety regulations are to be enforced and minimum safety distances are to be observed. If there is a safety concern or a need to minimize shrapnel, sandbags should be used around the target. Explosive charges should be placed as close as possible to the target, while ensuring it is not disturbed.

4. Quality Assurance

Quality Assurance (QA) is the system, put in place to maximize quality at all stages of an operation, from beginning to end, including the planning, training and mine clearance phases of all tasks.

Quality Control (QC) is an inspection or check before, during and after the operation is carried out. Quality Control is part of Quality Assurance. Dogs and mechanical equipment can be a part of a QC.

Manual mine clearance should achieve 100% removal of all mines and UXO on the 20cm depth. The manual mine clearance can be supported by Mine Detection Dogs (MDD) or mechanical equipment. If possible, all metal should be removed from the manually cleared ground. If the ground is unsuitable for a metal detector to be used on it, extra precautions may need to be applied, and supervisory procedures are to be increased. This may include such measures as: reduction in time for rotation of personnel in the clearance lane or reduction of the size of the area in front of the base stick to be cleared in each move forward. All procedures and precautions are to be detailed in SOPs.

Every operation will have two levels of Quality Control: internal and external.

5. Reporting

All organizations under the umbrella of ANAMA operations will provide reports to ANAMA. Details of this requirement are covered in a separate chapter contained in these standards.

6. Responsibilities

All members of the mine clearance team are responsible for safety. A well-trained and disciplined team is a safe and efficient team. Team leaders are to supervise activities closely in order to control procedures and monitor safety. Carelessness and a lack of adherence to established technical procedures can lead to an accident/incident. The two-man mine clearing team is to be considered as a team, and the members are to be made aware of their responsibility for each other.

The most effective way to ensure safety in mine clearance operations is to strictly enforce SOPs. While the mine clearance process is slow and tedious, failure to perform the correct procedures can result in needless injuries or deaths.

Confidence in the overall process for deminers, local people and organizations, donating resources to the mine clearance effort, is primarily based on the adherence to technical and safety standards.