DDAS Accident Report

Accident details

Report date:	22/01/2004	**Accident number:**	4
Accident time:	09:15	**Accident Date:**	28/09/1998
Where it occurred:	Sabie, Maputo Province	**Country:**	Mozambique
Primary cause:	Management/control inadequacy (?)	**Secondary cause:**	Inadequate training (?)
Class:	Handling accident	**Date of main report:**	[No date recorded]
ID original source:	none	**Name of source:**	ADP
Organisation:	[Name removed]		
Mine/device:	PMN-2 AP blast	**Ground condition:**	not applicable
Date record created:	11/01/2004	**Date last modified:**	11/01/2004
No of victims:	3	**No of documents:**	2

Map details

Longitude:		**Latitude:**	
Alt. coord. system:		**Coordinates fixed by:**	
Map east:		**Map north:**	
Map scale:	not recorded	**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

inadequate training (?)

inconsistent statements (?)

incomplete detonation (?)

mechanical follow-up (?)

protective equipment not worn (?)

safety distances ignored (?)

Accident report

A UN investigation was carried out and the report made available. The investigators conducted interviews and took statements on 30th September 1998. The accident occurred at a minefield near Sabie [the exact location was not specified] where the demining company were supported by a UN controlled demining section (including dog handlers). They were contracted to conduct mechanically-assisted mine clearance in what was effectively a "shared contract".

At 09.15 three deminers were injured when a mine detonated while being handled outside the mined area. Victim No.1 suffered severe hand and minor foot injuries. Victim No.2 suffered minor body and eye injures, and a hearing loss. Victim No.3 suffered a minor facial injury. The injured were taken by road (the report says that it would have taken too long to get official clearance for air evacuation) to Maputo Central hospital by 10:15. Victim No.1 was flown to Zimbabwe at an unspecified time for “follow-up treatment”.

The Field Manager stated that he was not aware that deminers were trying to disarm mines [clearly thought likely at the time]. He added later that the group's SOPs state that damaged mines must be destroyed in situ and any fragments of mines should be placed in a collections pit.

Victim No.2 stated that Victim No.3 asked Victim No.1 for a PMN2 mine casing to use for dog training. Victim No.1 gave him a mine case and started cleaning out sand from another, which exploded. He said that Mr Muronda got the mines from a group that were placed under some branches at the edge of the minefield.

Victim No.1 said he was carrying parts of PMN2s that had been broken by the machine "MIKE2" to a blast pit outside the mined area. In the blast pit were PMN2s and OZM-72s, some had been "thrown up" and others partially destroyed by the machine. He saw Victims No. 2 & 3 going through them and went to challenge them. They put some down but Victim No.3 still had one in his hand. Victim No.1 was bending to put the fragments into the pit when Victim No.3 dropped his mine and it exploded. Victim No.1 said that there were so many mine pieces after the machine had passed that he decided it was safer to move them to one place to destroy them. He said he would not move a live mine.

Victim No.3 took immediate medical leave and did not return, so delaying completion of the inquiry.

A witness said that Victim No.3 asked Victim No.1 for an empty casing for training dogs and Victim No.1 went to the pit to get the PMN2s. He had an empty mine in one hand and a damaged mine in the other. He tried to remove soil from the damaged mine and it went off.

Conclusions

A report of 12th October 1998 indicates that a UN board of inquiry was sceptical about Victim No.1's statement and believed that the probable sequence of events was that Victim No.3 asked Victim No.1 to get a PMN2 casing for use in mine dog training. Victim No.1 collected two damaged mines, handed one to Victim No.3 and began to clean the other when it went off. From the scale of the injuries, the board concluded that the "blast resulted from the detonation of the mine's booster charge". It was thought unlikely that the main charge was still present. The board decided that the primary cause of the accident was the improper handling of a PMN2, which had been removed before being made inert. The board concluded that the demining group's procedures were sound although slightly ambiguous in places, and should be tightened. They thought that Victim No.1's actions and decisions should be investigated further.

Victim Report

Victim number: 5 **Name:** [Name removed]

Age: **Gender:** Male

Status: supervisory **Fit for work:** yes

Compensation: not made available (insured) **Time to hospital:** 1 hour

Protection issued: Various **Protection used:** none

Summary of injuries:

INJURIES

minor Foot

severe Hand

AMPUTATION/LOSS

Hand

COMMENT

No medical report was made available.

Victim Report

Victim number: 6 **Name:** [Name removed]

Age: **Gender:** Male

Status: deminer **Fit for work:** yes

Compensation: not made available (insured) **Time to hospital:** 1 hour

Protection issued: Various **Protection used:** none

Summary of injuries:

INJURIES

minor Body

minor Eye

minor Hearing

COMMENT

No medical report was made available. The victim returned to work immediately after medical treatment in the field.

Victim Report

Victim number: 7	**Name:** **[Name removed]**
Age:	**Gender:** Male
Status: dog-handler	**Fit for work:** yes
Compensation: none	**Time to hospital:** 1 hour
Protection issued: Not recorded	**Protection used:** none

Summary of injuries:

INJURIES

minor Face

COMMENT

No medical report was made available. The victim was taken to hospital but the demining group reported that he had disappeared after first-aid treatment.

Analysis

The victim was a Team Leader and so a member of the management chain. The demining organisation involved declared he was in breach of SOPs. The investigators refer to "ambiguity" in those SOPs. Victim No.1 claimed to have been behaving responsibly. The events indicate a failure of the command chain and an argument in the field (possibly because two organisations shared the contract).

If the victim believed he was working properly by collecting damaged mines, there was a failure in his training or in the communication-chain. In this instance, revised training for the special circumstances of following a machine that left damaged mines was lacking. Knowledge of the operation of the damaged device was also lacking. The organisation has revised training, so implying a belated recognition of need (if not of previous “failure”). Training and selection of field supervisors is a management responsibility, so the primary cause of this accident is listed as a *"Management/control inadequacy"*. The secondary cause is listed as *“inadequate training”.*

Related papers

No Mozambican MAC/IND report was made available.

Victim No.1 was encountered in the demining group's offices on 16th December 1998. He showed the stump of his amputation (at wrist) with some pride but was not willing to discuss the accident. He was still working for the demining group in another capacity. The dog handler involved in the accident (Victim No.3) had apparently still not returned, and Victim No.1 cited this as proof of his version of events.