

DDAS Accident Report

Accident details

Report date: 05/07/2005	Accident number: 411
Accident time: 07:10	Accident Date: 02/02/2004
Where it occurred: Olimadu Village, Mullaitivu District, Vanni	Country: Sri Lanka
Primary cause: Field control inadequacy (?)	Secondary cause: Management/control inadequacy (?)
Class: Excavation accident	Date of main report: 04/03/2004
ID original source: RS	Name of source: LA
Organisation: Name removed	
Mine/device: P4Mk2 P4Mk1 AP blast	Ground condition: grass/grazing area hard
Date record created: 05/07/2005	Date last modified: 05/07/2005
No of victims: 1	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system: Not made available: see map	Coordinates fixed by:
Map east:	Map north:
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

visor not worn or worn raised (?)
inadequate equipment (?)
disciplinary action against victim (?)

Accident report

An IMSMA Mine Accident Report was made available in October 2004. The Demining group also made available its own report which follows the summary from IMSMA reproduced below. The internal investigation includes witness statements.

From IMSMA report:

“The deminer was working in his clearance lane using a heavy rake to excavate the ground. The ground was very hard and use of the light rake was limited. At approximately 0710hrs an explosion occurred under the rake. The deminer was not wearing his visor correctly and as a result incurred facial injuries as outlined below.

[The Victim suffered] Superficial fragmentation wounds to face and right leg. Deminer was standing in the clearance lane, excavating the ground using a heavy rake. The deminer was wearing full PPE (Visor and Fragmentation jacket however he was not wearing his visor properly. Instead of being positioned down inside the jacket’s deflector panel, it was lifted up allowing shrapnel from the blast to hit his face. The reasons given for wearing the visor in such a way was that the visor was scratched and restricted vision and that the cool morning dew was causing his breath to condense on the inside of the visor thus also restricting vision.”

The metal-tines of the rake were bent out of shape. The Victim’s visor showed “frag damage on inside”. There were also “frag marks on upper vest deflector shield”.



[The Victim’s visor with white scratching inside. The plastic hat holding the visor does not offer blast or fragmentation protection.]



[The collar of the victim’s protective vest, showing light marks.]

The accident occurred in an area described as “hard” and “flat”, with “light grass”.



[The picture above shows the accident site. The blast occurred to the right of the end of the lane.]

The last QA visit had occurred with a month of the accident (the IMSMA date field does not require a day, merely a month and year).

The Victim had completed a “Deminers” training courses.

Work had been ongoing at the site for 3 months. Deminers worked for 7.5 hours a day [in a split-shift system that gave a break during the hottest part of the day]. Work had been ongoing for 40 minutes when the accident occurred.

The Victim was treated within 2 minutes of the accident. Treatment took 3 minutes and he was then taken in a “safety vehicle” to a local hospital in 20 minutes. The Victim was treated for 30 minutes in the local hospital [stabilised] then transported to a “final medical facility” in a further 80 minutes [apparently on the following day]. [Total time to first hospital – 25 minutes.]

The IMSMA accident report shows that the accident was reported to the demining group HQ “orally” at 17:30 on the 09/12/2003. [Clearly this entry had remained unchanged after reporting the previous accident.] The IMSMA report was dated on the 07/02/2004.

Demining group accident report

Investigation conducted by [Demining group] Programme Manager & Technical Advisor south [edited for anonymity].

TIME OF ACCIDENT:07.10.AM

DATE OF ACCIDENT:02.02.2004 MONDAY

NATURE OF INJURY:superficial Fragging of the face and leg

TYPE OF MINE: P4MK1

MEDICAL POST where victim attended: Malavi & kilinochchi

All Statements were taken by HDU interpreter [Name excised]

Statement of Team Leader [Name excised]

I am the team leader of Team 06 Southern Group at 7.00 I was standing under the Palmyrah tree 100 meter away from the site of section two all was in order. At two minutes past seven I heard an explosion and saw smoke coming from a section two lane. Both my self and the section leader went to the site of the explosion. I advised the deminer to laid down. The

deminer's visor was clearly in a half raised position and still on his head. I realized the man had no serious injury but was cut around the mouth. He spoke to me and was conscious whole time. I called the medic by radio who was 300 meters away at the designated aid post. The medic arrived and began to treat the deminer. This section has been given told to keep their visors down on several occasions.

Team leader's additional comments: I believe that the deminer had his visor up because of misting of the visor due to early morning conditions. The section commander of section two was recently promoted and has performed his duties well. The last visit from a TA to my site was to my base camp at 11.30 on 23rd. [Name excised] was the man. Equipment requests have been put forward but have not materialized. New visors were part of the request.

Statement of Section leader of Section 2 team seven [Name excised]

I am the section leader of 2 section team seven and have been working for the last four months in that position. 10 minutes before to the accident I had warned the deminer to put his visor down .He was working with it in a raised position. When I heard the explosion I was not in the minefield but at the toilet I had received permission from the team leader to go. I came to the scene of to accident I saw that the deminer was not badly injured. That is all.

Additional comments: The command and control of my section is good I inspected my deminer's visors last Sunday. I noted that they were scratched.

I have made more than 4 requests for replacement of visors to TA [Name excised].

Statement of Witness number one: [Name excised] Section 2 deminer

I was standing in the lane on the right 10 meters back from the accident site. My section leader visited me 15 minutes before the explosion. The section leader did not speak to me but I saw him visit the deminer to my front. At the time of the explosion the section leader was out of the minefield.

Additional Comments : I had my visor replaced 1 month ago after the lock was broken on it this was done via the team leader.

Statement of Witness number two: [Name excised] Section 2 deminer

I was working as water carrier to section 2 so that the lanes would be made soft. I was delivering water in the lane behind the accident lane. When I heard the explosion i saw the team leader go to the accident spot. I was not aware that my section leader was not present at this time. I helped to man to leave the lane so that he could be attended by the medic.

Statement of Medic

Medic Testimony team six - section two: Accident date: 02/02/04; Testimony date: 02/02/04

On the 02/02/04 at approximately 07:10 while I was stationed at the rest area (300 meters from the demining site) I have heard an explosion and received an instruction from the team leader to attend the accident scene.

The team leader handed over to me the casualty for treatment.

Myself and my medical assistant-[Name excised] have started the medical treatment.

The casualty was in pain and was very distressed (crying and shouting loudly) at first look I identified that small superficial scratches on the face, which we cleaned, and applied dressings to, in addition I have found a small wound on the right thigh and treated it.

In addition I have provided the patient with a pain killer injection (Sosegen) to keep him calm and quiet.

As I was treating the patient the team leader, medical assistant, section commander, driver and 4 Deminers were beside me.

Then for further treatment and check-up I've chosen to take the casualty to Mallvi hospital – due to its close location and the fact that we have a truck that is difficult to manoeuvre and the patient was not in serious condition yet very distressed.

The next day I have admitted the casualty to Kilinochchi hospital.

[Photographs showing light injury to the Victim's leg, cheek and upper lip have been excised.]

Preliminary conclusions and recommendations

It is apparent from the team leader and the section leaders' statements that the events leading up to what happened differ. Therefore, a complete review of the command and control of the entire southern group must be reviewed and refreshed.

Further to this the entire logistical procedures must also be reviewed and the follow up to a request being made must be logged and reported if it affects safety. Both of these reviews must be carry out by the [Demining group] TA south. All equipment must be inspected on a weekly basis by the team leaders and a clear method of visor maintenance introduced.

The deminer was clearly working with his visor up and is lucky not to have received permanent injury to his eyes. He therefore will be dismissed from the [demining group] for a deliberate breach of basic safety.

It is further recommended that the team leader and section leader are fined an appropriate sum from their wages for failing to observe a basic safety infringement.

The entire team leader and section leaders group will receive a three-day refresher training of their duties and responsibilities. An emphasis must be placed on the section leaders to impose a fine or refer a recommendation for a deminer to be fined to the team leader. This must be backed up by the TA.

The TA in the south must demonstrate a noticeable improvement of the general procedures and basic command and control of the teams under his responsibility.

The section leaders must be rotated between sections in order to break any loyalties that prevent their ability to impose discipline within the sections.

The appointed field operations officer ([Name excised]) must be used to his full potential in the region in order to enforce discipline and basic SOPs directives.

All of the above must be enforced by the [Demining group] STA.

Signed: Demining group Programme manager

Victim Report

Victim number: 539	Name: Name removed
Age: 21	Gender: Male
Status: deminer	Fit for work: presumed
Compensation: Not made available	Time to hospital: 25 minutes
Protection issued: Frag jacket Short visor	Protection used: Frag jacket, short visor (raised)

Summary of injuries:

INJURIES

minor Face

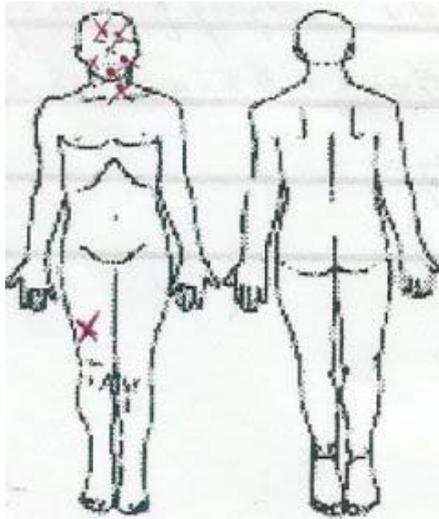
minor Leg

COMMENT

See medical report

Medical report

No formal medical report was made available. An IMSMA sketch of the victim indicating injury sites is reproduced below.

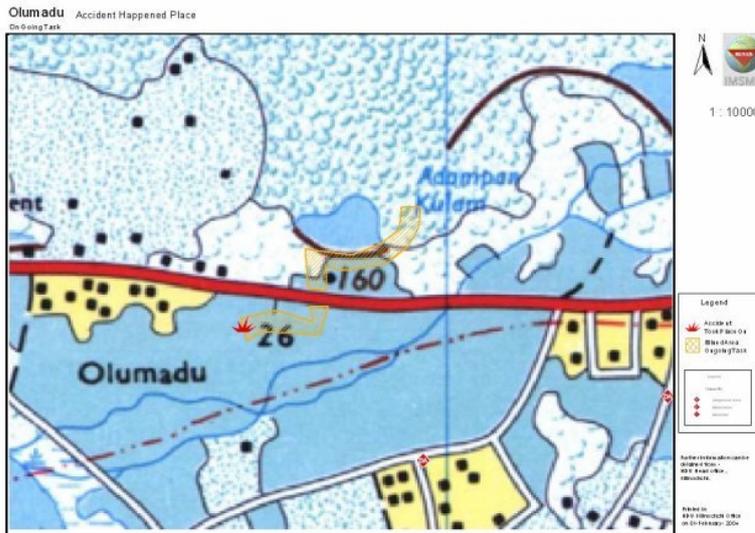


The Medic reported that: "The casualty was in pain and was very distressed (crying and shouting loudly) at first look I identified that small superficial scratches on the face, which we cleaned, and applied dressings to, in addition I have found a small wound on the right thigh and treated it.

In addition I have provided the patient with a pain killer injection (Sosegen) to keep him calm and quiet. Then for further treatment and check-up I've chosen to take the casualty to Mallvi hospital.... the patient was not in serious condition yet very distressed. ... The next day I have admitted the casualty to Kilinochchi hospital."

[It is not clear why the Victim was admitted to hospital the day after the event. It is possible that other injuries became apparent.]

Map of accident site



Analysis

The primary cause of this accident is listed as a *“Field control inadequacy”* because the victim was working with his visor raised and his error was not corrected. If one error was allowed to pass uncorrected, others may also have been and he may have been using the rake without due caution.

The secondary cause is listed as a *“Management control inadequacy”* because the visor was scratched and unsuitable for use, and the provision of adequate PPE is a management responsibility. Management responded by getting visors polished, which improved clarity but reduced thickness and so protection.

The internal demining group investigation identified and addressed the failings in their *“Field control”* in a professional manner.