DDAS Accident Report

Accident details

Report date: 14/01/2008

Accident number: 470

Accident time: 09:22

Accident Date: 04/09/2007

Where it occurred: Mf No. 71390029, Black Iris, Wadi Araba, North Sector, Graygra

Country: Jordan

Primary cause: Unavoidable (?)

Secondary cause: Unavoidable (?)

Class: Excavation accident

Date of main report: 25/07/2007

ID original source: JES

Name of source: [Name removed]

Organisation: [Name removed]

Mine/device: No 10 AP blast

Ground condition: dry/dusty
hard
sandy

Date record created: 14/01/2008

Date last modified: 14/01/2008

No of victims: 1

No of documents: 2

Map details

Longitude:

Latitude:

Alt. coord. system:

Coordinates fixed by: GPS

Map east: E 35.2672

Map north: N 30.6665

Map scale:

Map series:

Map edition:

Map sheet:

Map name:

Accident Notes

disciplinary action against victim (?)

long handtool may have reduced injury (?)

metal-detector not used (?)

no independent investigation available (?)

non injurious accident (?)

standing to excavate (?)

use of rake (?)

Accident report

The report of this accident was made available in August 2007 as a PDF file. Its conversion to a text file for editing means that some of the formatting has been lost. The substance of the report is reproduced below, edited for anonymity. The original PDF file is held on record.

ACCIDENT INVESTIGATION FOR [Demining group] – MINE ACTION TEAM – JORDAN,

Israeli Mf No. 71390029, WADI ARABA, NORTH NORTH SECTOR, GRAYGRA

GRID REF: N 30.6665: E 35.2672

4 SEPTEMBER 2007

INCIDENT REPORT

ISRAELI MINEFIELD NO - 71390029

MINEFIELD TASK ID - NN 18, SECTOR - NORTH NORTH, PLACE- BLACK IRIS, REGION - GRAYGRA

INVESTIGATION CONDUCTED BY – [Demining group], MUSTAFA AL-RHOUD

DEMINER: [The Victim], DoB: 01/01/1981

SECTION COMMANDER and TEAM LEADER: [Names removed]

TEAM: MANUAL TEAM THREE

TIME OF ACCIDENT: 09:22 AM

DATE OF ACCIDENT: 4 SEPTEMBER 2007

NATURE OF INJURY: No Injury

TYPE OF MINE : Israeli Anti Personnel No - 10

IMAS DETAILED REPORT FOR MINE INCIDENT TUESDAY, 4 SEPTEMBER 2007

Narrative: A mine blast incident occurred at approximately 09:22hrs on Tuesday 04/09/2007 in the minefield No-71390029 (Black Iris). Deminer 67178 [the Victim] detonated one No-10 Israeli anti personnel blast mine due to hacking on top of mine. At the time of the incident the deminer was wearing the PPE (Body vest and Goggles). The deminer sustained no injuries.

Immediately after the mine blast the deminer himself came out side. The deminer was then checked and sent to Risha hospital for checking by a medical doctor. After the checking the deminer has been sent to home because there are no injuries or problem.

Mine Blast Location

Device detonated while raking with Heavy rake.

Explosive hazard

The mine that was involved in the incident was an Israeli No-10 AP Mine. The resulting crater was Depth: approx. 20cm; Width: approx. 40cm.

Site conditions

The ground conditions at the site at time of the incident were “medium, flat”. The weather was clear and hot. There was no vegetation.

Team and task details

The team had been working for four months. They had been at this site for five weeks. They had been working at the particular task for four days, and had been working for two hours on the day of the accident.

The Victim was using a Heavy rake at the time. His PPE was a frontal vest and goggles.

Medical & First Aid

The Victim was taken to the Section Medical Point within six minutes of the accident. 22 minutes were spent at the site administering treatment. After that he was evacuated to Risha Health clinic in a further 27 minutes. Total time to reach hospital was 55 minutes. The Victim was in Risha Health Clinic for two three hours and five minutes.

Reporting procedures

Investigation conducted by: [Operations Manager]

Report compiled/translated by: [Name removed]

Report printed on 25/07/2007

Attachments:

Statements by Injured Members

Statements by Witnesses

Photographs of Injuries [Photographs of the deminer’s head, body, hands and arms show no injury.]

Copy of Medical Report [Not translated, so not reproduced.]

Observations and Recommendations by Operations Manager

OBSERVATIONS:

This accident may be avoided by taking more care and use of correct drill.

(a) The deminer is not followed the laid down drills.

(b) The deminer violated the laid down drill, he has to clear only 50 cm in the front but he tried to remove the mines at a distance of 75 cm from the tray.

(c) He has not approached the mines from the tray but he tried to remove the mine by loosening soil around the mine.

(d) The Incident happened due to hacking on top of the mine.

(e) The deminer has to be blamed for this incident.

RECOMMENDATIONS:

It is recommended that this kind of violation of the safety rules and drills should not be tolerated. Those who are failing to adhere to the rules should be given severe punishments. The deminer should be dismissed immediately.

Victim Report

Victim number: 630
Name: [Name removed]
Age: 26
Gender: Male
Status: deminer
Fit for work: yes
Compensation: Not appropriate
Time to hospital: 55 minutes
Protection issued: Frontal apron Goggles
Protection used: Frontal apron, Goggles

Summary of injuries:

COMMENT: Non injurious accident.

STATEMENTS:

Statement no.1: the Victim

Date: 04 September 2007

I came to work place before 7 o'clock and after the routine check and morning brief, then we were distributed to the working sites, I was working with manual team 3 section 4 in minefield number 71390029 lane number 4, I entered the site and found the first group of mines then mines moved the collection point, in the second hour after rest we came back to the working site, mine locater found 4 mines and located the area for digging, then during digging the area I passed it by 10cm, then while pulling the heavy rake mine blasts.

Question 1: Were you wearing the PPE?

Answer: Yes, I was fully protected.

Question 2: Did you take your safety and demining brief at morning?

Answer: Yes, as everyday.

Question 3: Was there a check on you by Team Leader?

Answer: Yes

Question 4: What was the reason of accident in your opinion?

Answer: The mine wasn't in the right place, as I was expecting it to be farther more. In addition I had a warning and a deduction from my salary at beginning of the day.

Question 5: Was there any requests of increasing the speed and the productivity?

Answer: Yes, everyday we hear request to increase the productivity, but not the speed.

Statement No.2: mine locator

Date: 04 September 2007

I am working as a mine locater in manual team 3, section 4, I was with deminer [the Victim] at around 8 o'clock and I have done locating the mines for him, then I went to another deminer, then at 9:22 I heard the blast from deminer [the Victim] site and saw the dust.

Question 1: What is your duty in the site?

Answer: Locating the mines, and identify the area of digging.

Question 2: Did you locate and identify the mines and area for [the Victim]?

Answer: Yes I did.

Question 3: What was the reason of accident in your opinion?

Answer: Deminer mistake.

Statement No.3: Section Commander

Date: 04 September 2007

While I was handing the mines for the EOD team in minefield 71390029 at the site of deminer [Name removed] 40m away from [the Victim's] site I heard the blast, immediately informed the ambulance and gave them direction of the blast, then I walked to the blast site, and saw

deminer [the Victim], checked him then informed the team leader, then informed the closest deminer to assist in moving the deminer [the Victim] out of the accident site.

Question 1: Did you check the deminer [the Victim] before Accident?

Answer: Yes, at 9:05hrs and recorded in my book.

Question 2: Did you notice any errors in [the Victim]'s work?

Answer: No, I didn't

Question 3: What was the reason of accident in your opinion?

Answer: Miss commitment of deminer [the Victim] in working at the area identified by the mine locater, as he was working farther from it.

Statement No.4: Team Leader

Date: 04 September 2007

I finished all the routine check of the sections before minefield 71390029, and it was done at 8:50hrs then continued checking the remaining sections, then I was in minefield 71390027 when I heard the blast and informed of it. I took the recommended procedures of stopping the work and went to the site of accident and monitored his evacuation to hospital.

Question 1: Did you notice any miss commitment of deminers work?

Answer: No, I didn't.

Question 2: Was the section commander in the right place?

Answer: Yes, he was but with another deminer.

Question 3: What was the reason of accident in your opinion?

Answer: Miss commitment of deminer [the Victim] in working at the area identified by the mine locater, as he was working farther from it.

Analysis

The primary and secondary cause of this accident are listed as "Unavoidable" because the hard crust on the ground surface could only be broken by using force. In this case, that force was enough to detonate the mine. It is possible that Victim was also breaching rules by "over-reaching" but the Operations Officer responded by dismissing him from service, which implies that appropriate corrective measures were being made to ensure that the procedures are generally conducted safely. The demining group had put in place the use of a long tool (rake) that kept the Victim far enough away from a blast to avoid injury, and his PPE was effective at protecting him from any risk remaining at that distance. Had he been using conventional short hand-tools, some injury would have been expected.

This demining group acknowledge the fact that stand-off (distance from the detonation) is the most effective PPE and their Rake Excavation system makes use of this. It is possible that the extreme length of the tool makes initiation of small AP blast mines with the Heavy rake more likely, but any increased risk of initiation is offset by the reduced chance of that initiation resulting in injury. The accident is a good example of balancing an effective demining process and PPE to result in a very low risk of injury.