

DDAS Accident Report

Accident details

Report date: 08/07/2005	Accident number: 415
Accident time: 08:50	Accident Date: 27/08/2004
Where it occurred: Punnalaikadduwan village, Valikamam South, Jaffna Province	Country: Sri Lanka
Primary cause: Inadequate equipment (?)	Secondary cause: Management/control inadequacy (?)
Class: Excavation accident	Date of main report: 28/08/2004
ID original source: JA-132 / LK-225 SP	Name of source: SP
Organisation: Name removed	
Mine/device: P4Mk2 P4Mk1 AP blast	Ground condition: bushes/scrub hard
Date record created: 08/07/2005	Date last modified: 08/07/2005
No of victims: 1	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system: Sri Lankan Grid	Coordinates fixed by: GPS
Map east: 0122355	Map north: 0505377
Map scale:	Map series: IMSMA
Map edition: 27.08.2004	Map sheet: GIS Arc Explorer 4.0
Map name: 1:10000	

Accident Notes

no independent investigation available (?)
non injurious accident (?)
inadequate equipment (?)
inadequate investigation (?)
long handtool may have reduced injury (?)
use of rake (?)

Accident report

The demining group involved made available its accident report during October 2004. The report was compiled in IMSMA format and is summarised below.

“Clearance” was in progress during what was recorded as a “Technical survey”. Confusion over the distinction between survey and clearance was apparent at the time.

“Navigation: Take B71 road 10 kilometers from Jaffna towards Palaly Airport. Stop 300 meters before big junction (left- Erlalai right-Atchuvely) and find a gas station in the right. In the spot, minelfield LK-225 is in left side of the road, starting 50 meters away. Accident spot is 70 meters to Northeast from gas station.”

“Technical survey was on-going in minefield LK-225, Punnalaikadduwan, when blast occurred at 08:50 am.

“Incident spot terrain is hard, red clay type soil with vegetation. Soil is softened before raking by moisturizing it with plenty of water. Antipersonnel mine was situated in a clear clay spot without rocks, heavy vegetation nor other disturbing objects around.



[The picture above shows the accident lane.]

“Experienced deminer uses his rake slowly and in a correct manner according to SOP. Suddenly he sets off an antipersonnel mine with his heavy rake. Heavy rake breaks into two pieces in the blast. Deminer remains in perfect health and doesn't have bruises nor other minor injuries.



[The picture above shows the broken rake in bushes to the side of the lane. The rake was not the approved tool, having four tines.]



[The undergrowth has been erased in this picture to reveal the rake tines.]

“Section leader is already near the spot and partially witnesses the incident.

“Paramedic comes to spot quickly, gives first aid, and finds deminer to be ok. Nevertheless, deminer is sent to Jaffna Teaching hospital to have a hearing sense check done. Later on the hospital doctor finds hearing sense being normal.

“Team leader conducts medevac routines according to Standard Operative Procedure, stopping all the demining in the minefield, evacuating team to admin area, counting personnel and closing the incident lane to remain untouched. Further on, he informs [Demining group] Jaffna administrator, technical advisor and the headquarters. Jaffna administrator confirms the information given earlier to the headquarters.

“Reason for mine blast remains unknown. Deminer used his tools correctly. Shape of the explosion crater is oval instead of round one, which implies slightly towards a conclusion that antipersonnel was not laid in normal horizontal (pressure plate upwards) position. Also deminer claimed that the mine was lying in position minimum 30 degrees from horizontal, but also stated that he did not see the actual mine before the blast.”

Victim Report

Victim number: 542	Name: Name removed
Age:	Gender: Male
Status: deminer	Fit for work: yes
Compensation: Not appropriate	Time to hospital: Not recorded
Protection issued: Frontal apron Long visor	Protection used: Not recorded

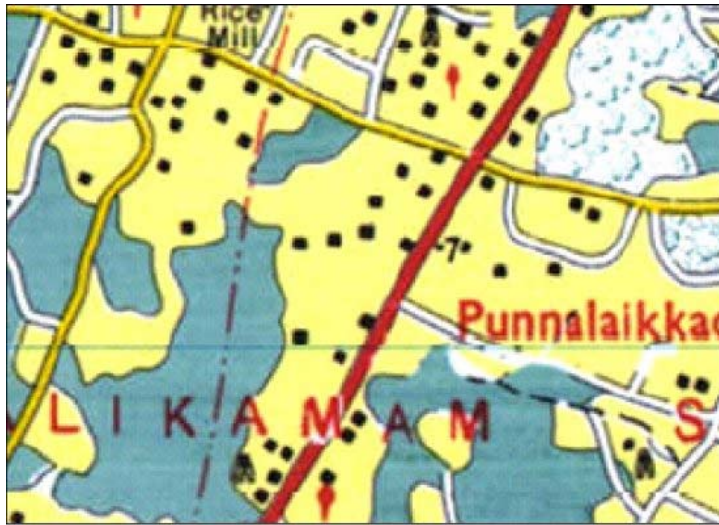
Summary of injuries:

COMMENT

Victim was taken to hospital for hearing check. Hearing was undamaged. No other injuries.

Maps

Map of accident site:



Analysis

The primary cause of this accident is listed as *“Inadequate equipment”* because the rake used was not approved for use internally by the group and had been previously shown to detonate mines in use. [The four-tine rake had been the cause of much bad publicity for the rake excavation method.]

The secondary cause of this accident is listed as a *“Management control inadequacy”* because the senior field manager (who conducted the investigation) was not aware of the rake design and operating principle detailed in the group’s own published SOP. Maintenance of up-to-date and safe SOPs are a management responsibility.

The investigation of this accident is listed as “inadequate” under “Notes” because no statements were taken and the internal investigator claimed that the victim was using his tool in accordance with his SOPs. The tool used was a 4-tine rake that was not included in the group’s SOPs and which did not use the raking principles detailed in the group’s SOPs. Its weight and right-angled tines had been banned by other groups because of the risk of initiating mines. [The group’s SOPs are held on file.]

The “inadequate equipment” listed under “Notes” refers to the four-tine rake.