DDAS Accident Report

Accident details

Report date:	19/04/2006	**Accident number:**	76
Accident time:	15:15	**Accident Date:**	08/08/1997
Where it occurred:	Ban Nadong Khouang, Saravane District Saravane Province	**Country:**	Laos
Primary cause:	Management/control inadequacy (?)	**Secondary cause:**	Management/control inadequacy (?)
Class:	Demolition accident	**Date of main report:**	18/08/1997
ID original source:	DM	**Name of source:**	MAG
Organisation:	[Name removed]		
Mine/device:	Mortar	**Ground condition:**	demolition site (explosives)
Date record created:	23/01/2004	**Date last modified:**	23/01/2004
No of victims:	1	**No of documents:**	1

Map details

Longitude:		**Latitude:**	__° __' __"
Alt. coord. system:		**Coordinates fixed by:**	
Map east:	Long: 106.19' 12.7"E	**Map north:**	Lat: 15.42' 05.4"
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

inadequate medical provision (?)

inadequate training (?)

no independent investigation available (?)

pressure to work quickly (?)

protective equipment not worn (?)

Accident report

An internal accident report was written for the demining group by a "Senior Ordinance Specialist" and dated 18th August 1997. The following summarises its content.

The team were to destroy pre-positioned munitions at a demolition site where the ground was waterlogged clay soil. There were two pits on the site, each containing three 4.2 inch HE mortars. The pits had independent firing cables to a point 330m to the East. The demolition took place at 14:20.

After a few minutes the victim and his interpreter left the firing point to watch a large column of smoke, indicating that some of the mortars had not been HE but had contained white phosphorus. At about 14:50 they, and three technicians approached the pits and saw lumps of white phosphorus scattered around. At 15:10 the victim went to the pit alone to see if it was safe to leave it. At that time it was past working hours on a Friday and no more demolitions were planned until the following Monday.

Using a spade he moved some white phosphorus that he thought was posing a hazard to undergrowth six metres from the pit. While he was doing this there was an explosion in the pit and phosphorus was thrown onto his hands and clothing. [This occurred at about 15:15.] The victim immediately removed his clothing. The senior Lao ordnance specialist present stated that the victim stripped to his underpants and mud was put on his hand, thigh and back. When the victim arrived at the Provincial Hospital (said to be "no time") no-one knew how to treat phosphorus burns, so the victim had to instruct the medical staff. The victim's own statement included a detailed description of his wounds and stated that the time for hospitalisation was 40 minutes.

Conclusion

The investigators concluded that "the explosion was caused by an HE burster and/or fuse "cooking off". This also resulted in another mortar being ejected from the pit". The victim did not handle all the mortars prior to demolition and there was a small possibility that had he done so he would have noticed the difference in weight between HE and White Phosphorus mortars (about 1 pound or 0.45Kg).

Recommendations

The investigators recommended that larger demolition charges be used if it is suspected that ordnance contains White Phosphorus, that they allow a minimum soak time of four hours before returning to a pit and if possible do not return until the next day. They added that personnel should wear protective clothing when inspecting a pit and that training should be given to medics and trainees at the UXO Lao school about White Phosphorus burns.

Victim Report

Victim number:	106	**Name:**	**[Name removed]**
Age:		**Gender:**	Male
Status:	supervisory	**Fit for work:**	yes
Compensation:	not made available (insured)	**Time to hospital:**	40 minutes
Protection issued:	Frag jacket Helmet Short visor	**Protection used:**	none

Summary of injuries:

INJURIES

minor Arms

minor Body

minor Hand

minor Legs

COMMENT

See medical report.

Medical report

No formal medical report was made available: see Accident report.

The victim described his injuries as "Minor burns to back and arms. Shallow burn right thigh 2.5cm x 1cn. shallow burn left thigh 4cm x 2cm Shallow burn back of left hand 1.5cm x 1cm."

Analysis

The primary cause of this accident is listed as a *"Management/control inadequacy"* because the victim was a senior Technical Advisor and so a part of the demining group's management team. He either breached SOPs, or the management had failed to devise appropriate SOPs in the first place.

The premature approach to the pit and the failure to wear protective clothing were significant failings of procedure that were (apparently) recognised by the victim.