



**DEPARTMENT OF MINERALS AND ENERGY
WESTERN AUSTRALIA**

SIGNIFICANT INCIDENT REPORT NO. 75

EXPLOSION IN UNDERGROUND MAGAZINE

INCIDENT

An underground operator drove an IT Services unit into a working party magazine to deposit a pallet of packaged explosives. As he manoeuvred the unit to relocate another pallet the articulated rear end struck the wall on which several hundred non-electric detonators were suspended on pegs. Several hundred of the detonators exploded in a chain reaction process, but fortunately the packaged explosives were not initiated and the operator escaped physical injury.

It is considered that the presence of the IT unit prevented the propagation of an explosion to the packaged explosive.

CAUSATION

The immediate causes were

- Failure to provide a storage system to the standard in the regulations; (Regulations **8.9 Working party's magazine underground** and **8.16 Storage of detonators**)
- Sub-standard procedure in transporting the explosives into the magazine.

PREVENTATIVE MEASURES

Detonators must be stored at least to a standard in accordance with the regulations, either in a separate magazine or in a magazine system designed and equipped so that any accidental explosion of detonators can not initiate stored packaged or bulk explosives.

No mobile equipment should be taken into any magazine unless the design and equipping precludes any possibility of the equipment impacting on stored (or spilled) explosives.

Where detonators and explosives are stored in any workplace for use during the shift, they must be located so that mobile equipment can not impact upon them.

J M Torlach
STATE MINING ENGINEER

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SAFETY AWARENESS SAVES LIVES