



**DEPARTMENT OF MINERALS AND ENERGY
WESTERN AUSTRALIA**

SIGNIFICANT INCIDENT REPORT NO. 52

**ROPE POWER SHOVEL MAINTENANCE
- FATAL ACCIDENT**

INCIDENT

A maintenance fitter received fatal injuries during a check for a broken shaft in the swing drive transmission on a rope power shovel. This check necessitated the removal of an inspection cover, located in a tight (confined) space, because of the adjacent hoist drum, and the fitter was observing the rotation of the shaft whilst the upper part of the shovel was being moved laterally by a bulldozer pushing against the bucket of the shovel.

CAUSE

The brakes on the hoist drums were inadvertently released when the swing drive brakes were released. Both brakes were operated by a common switch. During the lateral movement of the upper part of the shovel the hoist drums rotated, under the action of gravity on the bucket of the shovel, and a rope anchor block on one of the hoist drums trapped the deceased's head in the confined space.

COMMENTS AND PREVENTATIVE ACTION

- (i) All work in confined spaces should be properly scrutinised within the guidelines provided by Australian Standard AS2865 – Safe Working in a Confined Space.
- (ii) Proper isolation and tagging procedures must be followed when carrying out any work on equipment with particular emphasis on those isolation and tagging procedures where it is necessary to operate or move the equipment to allow for the work to be carried out.
- (iii) All recommendations supplied by the manufacturer/supplier of equipment, related to the operation and maintenance of their equipment, should receive proper consideration.

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SAFETY AWARENESS SAVES LIVES