

DEPARTMENT OF MINES WESTERN AUSTRALIA

SIGNIFICANT INCIDENT REPORT NO. 21

OPERATOR SAFETY – EARTHMOVING SCRAPERS

INCIDENT

The driver of an earthmoving scraper narrowly escaped injury when the tyre tread lifted on the wheel located directly behind the cab and the resultant peeled tread smashed into the cab and caused considerable damage. There have been several similar incidents, one of which did result in an injury to an operator when he was struck by a lump of tyre.

CAUSE

The cause of the tyre failure is unknown but is subject to intensive investigation by the manufacturer.

A potential hazard to the operator exists by virtue of the position of the cab relative to the wheel. No tyre can be guaranteed against these types of failure.

COMMENT AND REMEDIAL ACTION

All operating earthmoving scrapers should be surveyed to assess the safety of operators should a tyre failure of this type occur. If the survey shows a potential hazard then it is recommended that the scraper is fitted with some form of protection, such as a grid over the rear window. At least one supplier of earthmoving equipment offers a protection grid, for scrapers, as an optional extra.

In order to protect the operator the grid should be designed, constructed and installed in a manner that will function as a deflecting and yielding structure which will prevent any part of the rubber tyre from striking the cab rear window.

Prior to the attachment of any grid to the cab, it is recommended that the vehicle dealer/manufacturer be consulted to ensure that the integrity of the ROPS cab is not weakened and/or its certification revoked.

Furthermore, the grid should not significantly restrict the operator's rear view and it should allow for ready access to the window for cleaning purposes.

J M Torlach STATE MINING ENGINEER

March 1991

SAFETY AWARENESS SAVES LIVES