



**DEPARTMENT OF MINERALS AND ENERGY
WESTERN AUSTRALIA**

SIGNIFICANT INCIDENT REPORT NO. 66

**STRUCTURAL FAILURE OF BUCKETWHEEL RECLAIMER –
FATAL ACCIDENT**

INCIDENT

A plant operator received fatal injuries whilst operating a bucket wheel reclaimer during a loading operation. Early indications are that the jib or mast of the reclaimer failed catastrophically during a boom luffing operation and this failure allowed one of the boom support tendons to fall on top of the operator's control cabin severely damaging the cabin and fatally injuring the operator.

CAUSE

The cause of this structural failure and the circumstances of the accident are currently under investigation and no definite conclusions can yet be drawn.

RECOMMENDATIONS

1. Owners and operators of bulk materials handling equipment such as reclaimers, stackers and shiploaders should undertake comprehensive design checks of their equipment over their operating life. This is particularly important where modifications have been carried out, to upgrade or increase the original design capacity of the equipment. The design checks should be used to identify critical components and the risks associated with the failure of those components.
2. Inspection regimes involving detailed checking and testing where required, should be put in place in order to detect fatigue cracking on critical components which have been in service for extended periods of time. Appropriate maintenance processes should be adopted to reduce the risk of possible fatigue failures during operations.

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28 August 1996

SAFETY AWARENESS SAVES LIVES