

Safety, Health and Environment Division Department of Industry and Resources Mineral House, 100 Plain Street EAST PERTH WA 6004 Phone: + 61 8 9222-3333 Fax: + 61 8 9325-2280 Email:shed@doir.wa.gov.au www.doir.wa.gov.au

## **SIGNIFICANT INCIDENT REPORT NO: 127**

**Operator Tipped out of Elevating Work Platform** 

## Incident

The operator of a boom type charge-up vehicle escaped injury, when the tilt cylinder ram securing the basket failed. The operator had been working at heights of over five metres shortly before the incident and was being raised from the ground when the cylinder housing eyelet on the ram failed tipping the operator (who was not wearing a harness) out of the basket. Fortunately, the basket was only 2 metres off the ground and only minor injuries resulted.

## Cause

Investigations revealed, no schedule was in place for routine inspection, replacement or testing of key components, therefore signs of wear had not been identified and corrected. The cylinder housing eyelet is located in an area that is difficult to inspect and requires specific testing procedures to identify potential defects.

## **Comment and Preventative Action**

The accident could have been easily avoided by a thorough maintenance regime, inspecting the machine for cracking and wear of critical parts. Accidents involving falls / failures of elevating work platforms have serious potential and continue to occur in mining and general industry.

Earlier in the year, an incident occurred when an operator was tramming a charge – up vehicle. The operator noticed the basket slumped forward. On inspection it was found that the basket tilt pin was broken and had slid out of its bosses and bearings. The most probable cause was worn bosses, poor road conditions and or excessive dynamic load on the pin whilst the vehicle was tramming, which led to premature pin failure.

Procedures for safely operating elevating work platforms such as boom type charge-up vehicles and "cherry pickers" must include:

- The vehicle being maintained as per manufacturers recommendations, including a stringent preventative maintenance program to detect wear / defects and to fix them prior to a failure occurring.
- The vehicles are classified machinery and must be registered by the appropriate authority and subject to regular inspection by a competent person in compliance with the Mines Safety and Inspection Act and Regulations.
- Operators must be adequately trained in the use of Elevating Work Platforms such as boom type charge-up vehicles and cherry pickers.
- When working at height in a basket of an Elevating Work Platform, operators must be supplied and trained in the use of appropriate safety equipment such as full body harnesses and correct length lanyards. These must be correctly fitted and anchored to secure anchor points prior to raising the basket.
- Loads such as explosives and other equipment must not be carried in the basket of Elevating Work Platforms whilst tramming between work areas as this may place undue stress on critical components and lead to possible failures.

Your attention is also drawn to Significant Incident Reports Nos 30,48,53 and 60.

M J Knee STATE MINING ENGINEER 30/9/2004