Mines Safety Significant Incident Report No. 169

Suspension component ejected under high pressure during maintenance – fatal accident

Summary of incident
In late 2010, an employee sustained fatal injuries after apparently being struck by a suspension component that was ejected under high pressure during a routine maintenance operation.

Probable causes
This incident is under investigation but it demonstrates the hazard posed to employees where:
• they are required to work with equipment subject to stored energy; and
• there is a potential for the release of stored energy in an uncontrolled manner.

Action required
Regulation 6.24(1) of the Mines Safety and Inspection Regulations 1995 states:
(1) Where plant is dismantled, an employer must ensure that —
   (a) dismantling is carried out by a competent person; and
   (b) where available, any relevant information provided by the designer and manufacturer is made available to the competent person.

To avoid a recurrence of this type of incident, managers and employers must establish and confirm safe work practices for employees working with stored energy. These include:
• ensuring maintenance personnel
  − are appropriately trained and competent to carry out the task
  − follow original equipment manufacturer (OEM) service requirements and ensure any stored pressure is released in a controlled manner or is effectively isolated;
• where possible, fitting and maintaining warning labels to plant advising of any serious hazard (Figure 1); and
• maintaining effective communication between work groups and shifts, including detailing the work performed and the status of incomplete procedures.

Simon Ridge
STATE MINING ENGINEER
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Decal warns of (a) crush hazard and (b) requirement to support vehicle and consult OEM manual before maintenance.

Warning label specific to stored energy hazards. Decal warns of (a) high-pressure hazard and (b) requirement to release pressure and consult OEM manual before maintenance.

Figure 1  Examples of warning labels (photographs courtesy of WesTrac Pty Ltd and Caterpillar)