

## SCREENING PLANT FIRE



### Incident

A major fire occurred in the Screen Plant building of a surface crushing and screening plant at a large metalliferous mine.

Breakdown maintenance was being carried out on one of the primary screens in the Primary Screen Building by mine tradesmen, and in the course of this work it was necessary to cut some bolts with oxy-acetylene equipment. After completing the cutting of the bolts the tradesmen doused the area with water and conducted a visual inspection of the work area for approximately 5-10 minutes before leaving the building to go and collect additional equipment from the mine workshop. Approximately 5-10 minutes after the tradesmen arrived at the mine workshop they noticed thick, black smoke billowing from the Primary Screen Building.

### Cause

The probable cause of the fire was hot metal from the oxy-acetylene cutting process falling on to linatex rubber skirting in the chute beneath the screen, ultimately causing it to ignite. The fire then quickly spread by igniting linatex chute liners and polyurethane tiles on the screens.

### Damage

Extensive damage was caused to electrical cabling throughout many parts of the building and severe damage was also caused to the overhead crane bus-rails, wiring and pendant. Considerable mechanical damage was caused to both screens and all the polyurethane tiles on the screens were completely burnt away. Several conveyor belts incurred varying degrees of damage, minor damage was caused to sections of the walls of the building, the roof was extensively damaged and many of the interior lights were damaged.

### Comments and Preventative Action

- There is a need to have a "Hot Work" procedure in place, particularly when conducting oxy-acetylene cutting near flammable materials.
- There is a need to include a "spotting" system in any "Hot Work" procedure to guard against fires flaring after thermal cutting has been completed.
- Reference should be made to AS 1674.1 – 1997, Safety in welding and allied processes, Part 1: Fire precautions as well as to Guidance Note No. 18.12 of the Guidelines for Safe Mining when preparing "Hot Work" procedures.
- All relevant personnel should be made aware of the potential dangers of conducting thermal cutting near polyurethane and rubber.

For additional information contact Mr. S. Goodman, Senior Inspector of Mines on (08) 8080 0624.

A handwritten signature in black ink, appearing to read "N. Sneddon".

N. SNEDDON  
ASSISTANT DIRECTOR SAFETY OPERATIONS