INCIDENT

The operator of a remotely controlled load-haul dump machine died from injuries sustained when crushed between the rear of the loader and the sidewall of a stope access drive in an underground metalliferous mine. The deceased was found in an up-right position with the remote control transmitter. The position of the machine close alongside the sidewall and a large rock in the bucket indicated that some manoeuvring had taken place.

CAUSE

There were no witnesses to the accident but it is apparent that the operator was in close proximity to the rear of the machine at the time.

Damage precluded any testing of the remote control transmitter. However, using a substitute transmitter the machine's controls were proved to function as designed.

COMMENTS AND PREVENTATIVE ACTION

The circumstances of this fatality are common to those in a series of other tragic accidents involving remotely controlled machines occurring in both coal and metalliferous mines, where loss of life was avoidable by operating from a safe position well clear of the machine. Experience has shown that sudden and unintended machine movements can (and regularly do) result from various conditions, or system malfunctions.

The potential for operators of these machines to position themselves in locations where they may be crushed by the machine is a foreseeable risk and employers must take all practicable steps to provide and maintain a safe system and place of work in accordance with the duty of care in the Act.

A requirement to develop and adhere to a system of work which provides safe operating positions for all persons involved with remotely controlled machinery is stipulated in Mines Safety and Inspection Regulation 10.45 and must result from a detailed assessment of all the risks involved. Vigilance in supervision and safe behaviour monitoring is essential.

Guidelines relating to the design and risk assessment of remotely operated machinery may be referenced from AS/NZS4240:1994 - 'Remote controls for mining machinery'.

‘KEEP CLEAR AND STAY ALIVE’

J M Torlach
STATE MINING ENGINEER

23 February 1998

SAFETY AWARENESS SAVES LIVES