

SAFETY ALERT



ACCIDENTAL FIRE EXTINGUISHER DISCHARGE

INCIDENT

A load haul dump (LHD) vehicle driver had severe and extended breathing problems when a machine-mounted fire extinguisher emptied its contents over him. He was driving the LHD in an underground roadway at the time.

CIRCUMSTANCES

The man was driving the LHD when the handle of the dry chemical-powder fire extinguisher was crushed by contact with overhead water pipes. The extinguisher was mounted on the front wheel arch of the machine.

The impact started the extinguisher even though its locking pin stayed in place. The extinguisher discharge hose pointed directly over the driver and it emptied completely as the handle remained pushed by the overhead pipe.

INVESTIGATION

The mounting arrangement for the extinguisher did not protect the handle from impacts.

The way the extinguisher discharge hose pointed meant that any accidental discharge of the extinguisher would go towards and over the vehicle operator.

The confined space of the operator's compartment and the limited roof height in this roadway stopped the operator from being able to get clear of the chemical cloud made by the extinguisher.

There was confusion between the manufacturer, the service agent and the mine operator on the contents of the extinguisher and the medical responses needed.

RECOMMENDATIONS

- That mine operators review the mounting method and position of machine-mounted fire extinguishers. Both the level of physical protection for the extinguisher and the consequences (for whatever reason) of an unplanned discharge should be considered in this review.
- That chemical registers / data systems be kept up-to-date, and ensure that correct data sheets for both new and recharged extinguishers are readily available.
- That extinguisher discharge hoses be effectively confined or clamped to the side of the extinguisher so that in the event of an unplanned discharge the direction of chemical spray will be known.
- That mine operators ensure that overhead services / pipes are located well clear of the operating profile of mobile equipment required to use mine roadways.

APPROVED

R Regan
ASSISTANT DIRECTOR SAFETY OPERATIONS