

SAFETY ALERT

Rail loading bin spill

INCIDENT

An uncontrolled body of coal and slurry discharged from a rail loading bin, resulting in the bin control room glass window being broken and the room being inundated with slurry and coal lumps.

CIRCUMSTANCES

Two maintenance workers were cleaning out the bin in readiness to complete maintenance and repairs around the bin discharge. Prior to the incident, water and coal slurry from the 'run of mine' bin had been conveyed into the rail loading bin.

The hydraulically operated bin gates were being 'jogged' to free up the slurry in the rail loading bin when an uncontrolled mass of slurry ejected through the gates, resulting in large pieces of coal material and slurry smashing the control room window and entering the control room. The force of the discharge dislodged chairs, computers and other equipment onto the floor. Large shards of glass from the broken window were also propelled into the control room.

INVESTIGATION

The correct isolation procedures for the bin were carried out by the workers prior to the event, including the use of barrier tape around the bin bottom precincts to prevent inadvertent access by other workers. The maintenance workers were at the bin gate level at the time of the event and were not in danger from the falling slurry and coal, or the broken glass.

A job safety analysis (JSA) had been completed, however the sudden movement of a mass of slurry was not identified as a potential hazard. It is probable that the slurry mass was deflected by a cross beam, which formed part of the frame of the rail loading chute. That chute had been moved from under the gates, placing the support beam directly under the gates.

All bins at the site are cleaned out from time to time to perform maintenance work. There was no risk assessment completed or safe work procedure developed for cleaning out the bins.

The control room glass window was not rated to withstand breakage or inundation from the uncontrolled ejection of coal or slurry. There was a high

potential for severe injury to anyone located in the control room at the time of the incident.

RECOMMENDATIONS

1. All operators should review operational and maintenance tasks associated with coal storage and rail loading bins, and develop and implement safe work procedures to control risk associated with those tasks.
2. Operators should check the engineering integrity and location of control stations associated with bin operations, and where shortcomings are identified, implement actions to safeguard people required to work in the control rooms.
3. Operators should check the rating of any glass panels or windows in the control rooms to ensure they are rated to withstand breakage or inundation from uncontrolled ejection of coal or slurry.

NOTE: Please ensure all relevant people in your organisation receive a copy of this Safety Alert, and are informed of its content and recommendations. This Safety Alert should be processed in a systematic manner through the titleholder's / operator's information and communication process. It should also be placed on the workplace notice board.

Signed



Rob Regan
DIRECTOR
MINE SAFETY OPERATIONS BRANCH
INDUSTRY & INVESTMENT NSW

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