

DATE: JULY 2018

Drill rig suspended 50m above ground after breaching highwall windrow

Issue

A drill rig at an open cut coal mine trammed over and through a highwall windrow resulting in the machine straddling the windrow with one track suspended over the edge of the highwall.

Circumstances

During the night shift on 26 June 2018, a drill rig operator was repositioning a drill to a face row hole near a highwall. The operator was using the global positioning system (GPS) of the drill to set up over the hole when the rig travelled over and through the windrow. On straddling the windrow, the machine was no longer able to propel itself forward and came to a halt with the right hand track suspended over the highwall. The operator was able to safely dismount the drill with no physical injuries and called for assistance.

Dozers were secured to the drill to drag it clear of the highwall. See the drill rig position in relation to the highwall in the image below.

Photograph 1: Drill rig on the edge of the 50 metre highway. Image courtesy of the mine.



Investigation

The mine is conducting its own detailed investigation into the incident, however preliminary findings from the Resources Regulator investigation are:

- The drill rig operator was unaware of the drill rig's position in relation to the highwall.
- The drill rig operator was still undertaking training and had been working in the role for the past six months.
- The drill rig operator had limited visibility because of working at night, the design of the rig's cab and the repositioning path.
- The drill rig operator relied on the GPS unit in the drill rig, which potentially limited his situational awareness.
- The drilling supervisor was only onsite during daylight hours, with the open cut examiner performing intermittent inspections of drill patterns during the night shift.

Recommendations

1. Drilling operations near high\low\end walls should be conducted during daylight hours as far as reasonably practicable, with appropriate rigour within risk assessment and planning activities for the management of this hazard.
2. Drills should never be positioned parallel to a highwall edge.
3. Training and competence arrangements for drillers to work solo should be reviewed, with reference to restricting and managing high risk drilling work until competency is obtained.
4. Supervision and management of trainee drillers should consider high-risk areas on the drill pattern through:
 - a. specific task planning inclusive of the drill travel on patterns
 - b. restricting their work activities
 - c. implementing additional controls to manage the risk of drilling work outside of daylight hours.
5. Review adequacy of high wall demarcation on high wall benches.
6. Drillers should inspect their work area (drill pattern) to identify high-risk areas and safe paths of travel between holes, acknowledging drill cab, mast and highwall positions.

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