

MAJOR COLLAPSE OF BATTER IN OPEN CUT COAL MINE UPDATE

INCIDENT:

This is an update on the Significant Incident Report issued previously in relation to the Yallourn Mine coal batter collapse that occurred on Wednesday the 14th of November 2007. The collapse allowed the Latrobe River to flow directly into the mine and caused substantial damage to the mine conveyor systems, other mine facilities and the environment. No persons were injured in the collapse. However, any batter collapse poses a serious risk to safety.

COMMENTS:

In response to the incident, the government appointed a mining warden to conduct an inquiry to establish the facts and causes of the batter collapse. That inquiry has been completed and a comprehensive report and the government's response have been published.

The department has also completed an investigation into compliance with the mining licence and approved conditions.

The warden's enquiry has established that the batter failure was not new or unusual and it occurred by a mechanism called block sliding, caused by water pressures in a joint along the rear of the failure and water pressures in the interseam clays underlying the coal.

The warden found that there was a failure of the geotechnical management system at all levels and the future significance of many important signs evident prior to the collapse that showed that failure was imminent were not interpreted correctly and were not recognised either internally or externally by technical advisers and reviewers.

RECOMMENDATIONS

- Mine operators must ensure that the hazards associated with batter collapse have been identified, that a risk assessment has been conducted and that the necessary risk controls have been implemented.
- The stability of batters must be maintained by the use of appropriate control measures resulting from the full integration of geology, hydrogeology and soil mechanics into geotechnical stability models.
- Mine operators must continuously develop their geotechnical and hydrogeological models. It is critical for maintenance of future stability in mining operations that the historical experience and understanding is not lost, but effectively captured in new and evolving models of understanding.
- Mine stability modelling and assessments must be confirmed by in-field monitoring of the batters.
- Geotechnical modelling, monitoring and assessments must be performed by suitably qualified persons, and where appropriate, peer review must be done.
- Mine operators must ensure any new or significant changes to mine plans, mine layouts or mining systems are suitably evaluated from a geotechnical and hydrogeological basis before they are adopted.

FURTHER INFORMATION

- For information on the Terms of Reference for the two enquiries, see the *What's New* section of the *Minerals & Petroleum* part of the DPI website, at www.dpi.vic.gov.au

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