

FACT SHEET

Assessment Program – Ground or strata failure and slope stability – surface coal operations

September 2020



The principal mining hazard of ground or strata failure can occur through various mechanisms at surface mining operations and therefore potentially place workers at risk if not controlled effectively. The management of slope stability is a key mechanism within this process and should be assessed both individually and cumulatively with other hazards.

The Resources Regulator is commencing a program of planned inspections and targeted assessments at coal operations focussing on the critical controls associated with slope stability. The assessments will be focussed on the following criteria:



Mine design

Ground stability risks are assessed and controlled within the mine design and mine operating parameters.

Water management

Controls for ground or strata water damage risks are implemented.



Dump to design

Identifying factors which affect dump stability, correct construction of dumps, and ensuring dumps are inspected and monitored for compliance.

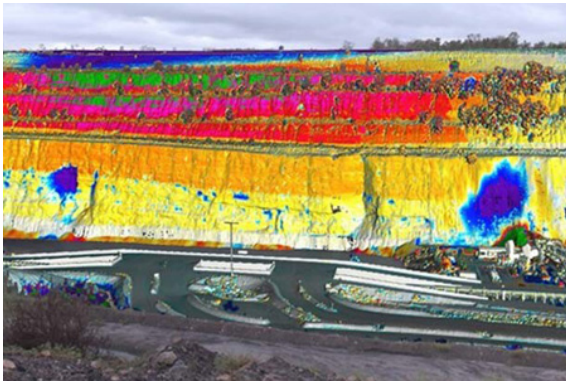


Excavate to design

Walls are excavated to design and cleared of loose material.

Drilling and blasting practices

Execution of drill and blast practices are completed to designed specifications.



Separate people from the ground or strata hazard

Indicators of potential failure are identified and people are subsequently protected from areas of risk.



Rollover protective structures (ROPS) and falling object protective structures (FOPS)

Plant design provides a barrier for falling objects and also prevents workers from being crushed in a rollover event.

Considerations

Mines should consider the above criteria as a minimum and ensure that such information is included within their respective principal hazard management plans and associated documentation. Following investigations into strata failure incidents within the mining industry, it is evident that non-compliance to these key control measures have contributed to incident outcomes, which has caused both severe and fatal injuries to workers. When identifying and implementing control measures, mines are also reminded to follow the hierarchy of controls to ensure health and safety risks are minimised so far as is reasonably practicable.

Other relevant safety alerts and bulletins published by the NSW Resources Regulator:

DATE PUBLISHED	REFERENCE	TITLE
04 Feb 2020	SB20-01	Failure of highwalls
14 Aug 2019	SB19-09	Lack of bunding on accessible edges
19 Dec 2018	SA18-13	Dangerous incident involving excavator on edge of highwall
10 July 2018	SA18-09	Drill rig breaches highwall windrow
10 July 2018	SB18-11	Windrow management and demarcation
21 March 2017	SB17-03	Rocks breach catch bund
9 Jan 2017	SB17-01	Industry reports more truck rollover incidents

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