

FACT SHEET

Planned Inspection Program – Ground or strata failure

Surface metalliferous operations and tier 1 quarries

February 2021



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 NSW Resources Regulator is commencing a program of planned inspections and targeted assessments at surface metalliferous operations and tier 1 quarries 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 practice

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

Mine operators 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, mine operators are also reminded to follow the hierarchy of controls to ensure health and safety risks are minimised so far as is reasonably practicable.

Additional resources

Other relevant safety alerts and bulletins published by the Regulator:

DATE PUBLISHED	REFERENCE	TITLE
Feb 2020	SB20-01	Failure of highwalls
Aug 2019	SB19-09	Lack of bunding on accessible edges
Dec 2018	SA18-13	Dangerous incident involving excavator on edge of highwall
July 2018	SA18-09	Drill rig breaches highwall windrow
July 2018	SB18-11	Windrow management and demarcation
March 2017	SB17-03	Rocks breach catch bund
Jan 2017	SB17-01	Industry reports more truck rollover incidents
Nov 2014	IIR14-06	Track mounted excavator tip over

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