

NSW Resources Regulator

FACT SHEET

Planned Inspection Program – Ground or strata failure

Underground coal operations

February 2021



Ground or strata failure is a principal hazard which is prevalent within underground mining environments and can potentially cause serious and/or fatal injuries to workers if not controlled effectively. This fact sheet is primarily based on the critical controls for ground or strata failure within the underground coal mining sector and should be considered by mine operators when assessing the risk at their operation.

The NSW Resources Regulator is commencing a program of planned inspections and targeted assessments which will be focussing on the critical controls identified below and ensuring compliance across the underground coal mining industry in NSW.



Ground characterisation

Accurate geological, hydrogeological and geotechnical information informs mine design and ground support design.



Mine design

Ground or strata performs as predicted.

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Ground support

The ground around an excavation remains stable for its design life.



Ground support lifecycle management

Installed ground support continues to perform as designed.



Control access to unsupported ground

Prevent people being injured by a fall of ground or strata.

Manage void formation

The volume of voids is maintained at a level that reduces the risk of airblast, windblast and periodic weighting.

Considerations

In considering the risks associated with strata, mines should consider the above controls as a minimum and ensure that information on how these controls are implemented and maintained is included within their respective principal hazard management plans and associated documentation. Following investigations into strata related incidents, 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
Feb 2020	SA20-02	Roof fall buries continuous miner
July 2018	SB-18-12	Rib failures in underground coal mines
July 2018	IIR 18-05	Serious injuries at an underground coal mine
Feb 2015	Code of Practice	Strata control in underground coal mines
Aug 2012	Investigation Report	Fatal injury from falling coal slab

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