

# Fact sheet

## Assessment program – Structural collapse - metalliferous mines and tier-1 quarries

March 2023

Structural collapse is a hazard which can occur within various mining environments and has the potential to cause serious and/or fatal injuries to workers if not controlled effectively. This fact sheet is primarily based on the critical controls for the risk of structural collapse within the metalliferous and quarry sectors and should be considered by mine operators when assessing the risk at their operation.

As a result, the Resources Regulator is commencing a program of planned inspections and targeted assessments which will be focussing on the below criteria and ensuring compliance across the metalliferous and quarry industries in NSW.



### Structural integrity

- Plant and structures remain structurally stable while performing their design function for the duration of their operational life.

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### Traffic management

- Plant and structures are protected from mobile equipment impact damage.

### Operate within design limits

- Plant and structures operate safely within the load and duty cycle for which they were designed.



### Repair modification quality assurance

- Structural repairs or modifications preserve structure stability.

### Corrosion protection

- Use barrier coatings, avoid moisture, and use non-corrosive metals to maintain the structural integrity of plant or structure.

## 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 structural collapse 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.

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

Date published	Reference	Title
March 2001	SA01-08	<a href="#">Silo collapse highlights structural issues</a>
August 2019	Code of practice	<a href="#">Managing the risks of plant in the workplace</a>
December 2018	SA18-15	<a href="#">Walkway collapse puts workers at risk</a>
November 2017	Consolidated report	<a href="#">Structural integrity of coal handling and preparation plants</a>
November 2016	SA16-06	<a href="#">Sudden failure of feed hopper</a>
September 2016	Code of practice	<a href="#">Mechanical engineering control plan</a>
April 2009	SA09-07	<a href="#">Structural failure and collapse of drill rig mast</a>
January 2007	SA07-03	<a href="#">Structural bin failure</a>
October 2006	SA06-17	<a href="#">Failure of scaffolding</a>

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