

# Fact sheet

## Control plan – mechanical engineering control plan – uncontrolled structural collapse or failure

August 2024

The Resources Regulator has developed a broad-brush risk assessment and a program of bowties to review principal hazard and control plan topics.

The bowtie program identified the material unwanted events (MUE) and critical controls to prevent serious injury or death of mine workers.

The bowtie for the control plan topic of mechanical engineering control plan identified 6 MUEs and the critical controls for assessment programs. This fact sheet provides information related to the assessment program focussing on the MUE – uncontrolled structural collapse or failure.

### Control plan – mechanical engineering control plan (MECP)

#### MUE – uncontrolled structural collapse or failure

#### MUE critical controls

The Regulator’s assessment program will focus on the following critical controls to prevent an uncontrolled structural collapse or failure:

- Fit-for-purpose structural design.
- Fit-for-purpose mine design (including the management of subsidence affecting the mine site).
- Reduction of mine activities or removal of personnel.
- Separation and/or segregation.

#### Considerations

Mine operators should consider the MUEs above as a minimum and ensure that the review of critical controls to prevent serious injury or death is included within the site mechanical engineering control plan and associated documentation.



# Fact sheet – MECP – uncontrolled structural collapse or failure

Other relevant safety alerts, safety bulletins and information resources published by the Resources Regulator:

Date published	Reference	Title
June 2024	Consolidated report	<a href="#"><u>Structural collapse – METEX mines above and below surface – March 2023 to February 2024</u></a>
September 2023	Consolidated report	<a href="#"><u>Structural collapse - coal mines above surface –July 2021 to June 2023</u></a>
October 2022	NSW Code of Practice Resources Regulator	<a href="#"><u>NSW code of practice: Mechanical engineering control plan</u></a> <a href="#"><u>Republished update</u></a>
June 2022	Safety bulletin	<a href="#"><u>Safety bulletin SB22-06 Pipe clamp failures</u></a>
September 2021	Safety alert	Safety alert SA21-08 <a href="#"><u>Proper design, construction, inspection and use of scaffolding</u></a>
March 2021	Safety alert	<a href="#"><u>Safety alert SA0108 Ailo collapse highlights structural issues</u></a>
August 2019	NSW code of practice NSW SafeWork	<a href="#"><u>Safe design of structures</u></a>

References	
Program type	CP-1504
Control plan	Mechanical engineering control plan
MUE number	MUE04

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