

Fact sheet

Principal hazard – ground or strata failure (surface)

October 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 principal hazard topic of ground or strata failure identified 3 MUEs and the critical controls for assessment programs. This fact sheet provides information related to the assessment program focussing on the MUE – uncontrolled movement of ground related to all types of **surface mining operations**.

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MUE – uncontrolled movement of ground (surface)

MUE critical controls

The Regulator’s assessment program will focus on the following critical controls to prevent an uncontrolled movement of ground related to all types of **surface mining operations**:

- The mine (layout, sequence, method and support) is designed to geotechnical, strata and hydrogeological conditions.
- Dump design.
- Drill and blast management.
- Water management systems.
- Workers are restricted / removed from high-risk areas.

Considerations

Mine operators should consider the material unwanted events above as a minimum and ensure that the review of critical controls to prevent serious injury or death is included within the site principal hazard management plans and associated documentation.

Relevant safety alerts, safety bulletins and information resources published by the Regulator include:



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Date published	Reference	Title
April 2023	Consolidated report Tier 1 quarries & surface metalliferous mines	<u>Ground or strata failure – slope stability – tier 1 quarries and surface metalliferous mines</u>
February 2023	Compliance priority report – surface coal mines	<u>Surface coal – windrows and edge protection standards</u>
November 2022	Consolidated report Small mines	<u>Ground or strata failure – slope stability – small mines</u>
December 2021	Consolidated report surface coal mines	<u>Ground or strata failure – slope stability – open cut coal mines</u>

References	
Program type	PH-0402
Principal hazard	0402 Ground or strata failure (surface)
MUE number	MUE02

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