

# Fact sheet

## Control plan – explosives control plan – unintended detonation of explosives

May 2025

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 explosives control plan identified one MUE and the critical controls for assessment programs. This fact sheet provides information about the assessment program focussing on the MUE – unintended detonation of explosives.

### Control plan – explosives control plan

#### MUE – unintended detonation of explosives

#### MUE critical controls



The Regulator's assessment program will focus on the following critical controls to prevent serious injury or death caused by unintended detonation of explosives:

- Blast design (including blast-product sequencing) considers conditions and design.
- Initiation equipment fit for application.
- Restricted access (including bench activities, storage and during transport).
- Explosives transport/handling (including a mobile processing unit) equipment designed for products and conditions.
- Traffic management around loaded shots, magazines, reload facilities, shared haul roads.
- Heat sources separated from explosives and precursors.
- Lightning protection/earthing on manufacturing plant and magazines.
- Equipment has operator protection (excavation for unintended initiation of misfires).
- On-site emergency response.

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## Considerations

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

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

Date published	Reference	Title
April 2025	Regulator's web page	<a href="http://www.resources.nsw.gov.au/resources-regulator/safety/licences-and-registrations/blasting-explosives-user-licence">www.resources.nsw.gov.au/resources-regulator/safety/licences-and-registrations/blasting-explosives-user-licence</a>
March 2025	Safety bulletin	<a href="#">Safety bulletin SB25-01 Complaints about blasting notices increase</a>
September 2024	Investigation information release	<a href="#">Investigation information release IIR24-08 Unplanned explosion during mining operations</a>
August 2024	Consolidated report	<a href="#">Compliance priority report - Blasting (explosives safety) - small mines</a>
November 2023	Consolidated report	<a href="#">Consolidated report - Explosives control plan stage 1 - metalliferous mines and quarries, surface and underground</a>
November 2023	Safety alert	<a href="#">Safety alert SA23-04 Unintended initiation of unidentified (misfired) explosives during excavation</a>
October 2023	Consolidated report	<a href="#">Consolidated report - Explosives control plan stage 1 - coal mines surface and underground</a>
September 2022	Safety bulletin	<a href="#">Safety bulletin SB22-12 Fires occurring on mobile manufacturing unit trucks</a>
May 2022	Investigation report	<a href="#">Causal investigation report - Unplanned initiation of explosives at Peak Gold Mine</a>
May 2021	Investigation information release	<a href="#">Investigation information release IIR21-06 Person at risk from flyrock at quarry</a>
April 2021	Safety bulletin	<a href="#">Safety bulletin SB21-02 Flyrock from blasting activities</a>

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