

Fact sheet

Control plan – mechanical engineering control plan – unintended interaction with rotating or moving equipment

April 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 mechanical engineering control plan (MECP) identified 6 MUEs and the critical controls for assessment programs. This fact sheet provides information about the assessment program focussing on the MUE – unintended interaction with rotating or moving equipment.

Control plan – mechanical engineering control plan

MUE – unintended interaction with rotating or moving equipment

The Regulator's assessment program will focus on the following critical controls to prevent serious injury or death caused by unintended interaction with rotating or moving equipment.



- Removable guarding (removed using tooling).
- Two handed control limiter (reduces pressure and speed when operating with one hand, safe mode).
- Maintenance of a separation distance from unguarded entanglement hazards (safe standing zone, exclusion zone, no-go zone, drop zone).
- Equipment is prevented from operation while people are working near hazards (isolation process).
- Hazardous energy treatment (identified and controlled - hazardous energy treatment blocking or chocking).

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 – Mechanical engineering control plan – unintended interaction with rotating or moving equipment

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

Date published	Reference	Title
January 2025	Investigation information release	<u>Investigation information release IIR25-01 Worker suffers serious injury while working on unguarded section of a fixed conveyor</u>
July 2024	Investigation report	<u>Investigation report: Serious hand injury to a worker operating a mobile screen</u>
July 2024	Safety bulletin	<u>Safety bulletin SB24-04 Serious hand injury to a worker operating a mobile screen</u>
May 2024	Investigation report	<u>Investigation report: Serious hand injury to a worker operating a mobile screen</u>
October 2023	Safety bulletin	<u>Safety bulletin SB23-08 Haul truck front strut removal poses risk to workers</u>
September 2023	Investigation information release	<u>Investigation information release IIR23-07 Serious injury of a worker performing maintenance work on a mobile screen</u>
August 2023	Safety alert	<u>Safety alert SA23-02 Serious injury of a jumbo offsider during drilling work</u>
July 2023	Investigation information release	<u>Investigation information release IIR23-06 Serious injury of a jumbo offsider during drilling work</u>
May 2023	Investigation report	<u>Investigation report: Serious injury of a worker at Thuddungra Mine</u>
February 2023	NSW code of practice	<u>NSW code of practice: Mechanical engineering control plan</u>
November 2022	Investigation information release	<u>Investigation information release IIR22-05 Worker seriously injured using a crowbar to push a securing pin on a dozer counterweight during a lifting inspection</u>

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