



**NSW  
Resources  
Regulator**

PLANNED INSPECTION PROGRAM

# **CONSOLIDATED REPORT: ENTANGLEMENT – METALLIFEROUS MINES & TIER 1 QUARRIES**

July 2021 - March 2022

**Document control**

Published by NSW Resources Regulator

Title: Consolidated Report: Entanglement - Metalliferous mines & Tier 1 quarries

First published: August 2022

Authorised by: Chief Inspector

CM9 reference: RDOC22/35086

**AMENDMENT SCHEDULE**

Date	Version	Amendment
August 2022	1.0	Initial creation of document

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## Executive summary

A crucial part of the NSW Resources Regulator’s Incident Prevention Strategy involves targeted assessment and planned inspection programs for mines and petroleum sites. This is a focus on assessing an operation’s control of critical risks through evaluating the effectiveness of control measures in the mine’s safety management system.

To this end the NSW Resources Regulator developed a bowtie hazard management framework and standardised assessment checklist for each program plan. Under each program plan, the effectiveness of the safety management system at each mine site is assessed against a standard set of control supports and critical controls.

This final report summarises assessment findings from 30 mines for the hazard of entanglement, conducted during the period from July 2021 to March 2022. The threats, consequences and critical controls assessed for the material unwanted event of entanglement are shown in Table 1. Note that not all critical controls were applicable at all mines.

*Table 1. Threats, consequence and critical controls for the material unwanted event – entanglement – Metalliferous Mines & Tier 1 quarries*

THREAT/CONSEQUENCE		CRITICAL CONTROL
Threat	1. Engagement with moving parts	PC1.1 – Equipment safeguarding
		PC1.2 – Safe standing zones
	2. Unexpected movement of machine parts	PC2.2 – Isolation standards
Consequence	1. Physical trauma fatality	MC1.2 – Emergency stops

Legislative requirements and published guidance relating to the hazard of entanglement is listed in **Appendix A**. Figures 1 and 2 present safety compliance findings for each de-identified mine and critical control assessed for the material unwanted event of entanglement. Explanatory notes on the assessment system are also listed in **Appendix B**.

## Key findings

Non-compliance to work health and safety legislation at several sites required the issuing of 63 notices. Thirty-seven were issued under section 191 and 1 under section 155 of the *Work Health and Safety Act 2011*. A further 25 notices were issued under section 23 of the *Work Health and Safety (Mines and Petroleum Sites) Act 2013*.

Risk assessments associated with the development of mechanical engineering control plans were often missing key elements regarding the hazards associated with entanglement. In some cases, risk controls identified in the risk assessments were not mapped into the principal control plans and safety management system.

Issues identified included:

- Risk assessments did not include entanglement or risk controls to prevent harm to people from the hazard.
- Provided documentation containing risk assessments, plans and procedures were generic company-based and did not reference NSW legislation. Those that were listed were often found to be out of date.
- Generic company-based risk assessments and plans were not reviewed to include hazards and risk controls that related specifically to the site.
- Risk assessments reviewed often contained cut and paste elements that had repetitive control actions for each identified hazard, that tended to mask the specific risk controls for that hazard.
- Risk assessments were reviewed that did not contain a cross section of workforce which had regard for the hazard.
- Broad brush risk assessments that included entanglement specific to conveyors but did not consider rotating equipment such as pumps, crushers and drilling plant.
- Mechanical engineering control plans were not reviewed due to people involved in their formation having left the organisation and replacements had not yet reviewed or updated the plan.
- Mechanical engineering control plans were found that did not reference applicable standards such as AS4024 series for safeguarding of machinery and the technical reference guide for mobile plant.
- Contractor safety management plans did not consider entanglement as a hazard.

- Identification of design, functionality or location of emergency stops were not defined in management plans.
- Safe standing zones, no-go zones or barricades were not included in identified risk controls.
- Discrepancies were observed between isolation of energies procedures that allowed for the use of a tag only for isolations, however mine site instructions to workers also required locks to be used.
- Compound and group isolation procedures did not include a formal shift change handover procedure or cover if the isolation officer had left site.

### Field observations included:

- Guarding was fitted to drive shafts on pumps and conveyors that did not fully protect people from being able to contact rotating elements due to excessive gaps.
- Signs were missing on key areas of plant and equipment that required isolation of energy sources before removing guards.
- Emergency stop lanyards on conveyors were positioned behind guarding or damaged, which made them inaccessible and ineffective. Some were positioned and anchored at an inaccessible height.
- Poor housekeeping standards including spilled product such as large rocks, unrestrained tools such as crowbars and hammers, spare parts and replaced items of plant cluttering walkway gantries that had the potential to become falling objects.
- Operational plant had guards missing or mountings broken, even though the documentation stipulated that plant and equipment were not to be operated when safeguarding was compromised. Mine operators could not provide assessments that identified risk controls to prevent harm to people from the continued operation of the plant.
- Underground drilling sites did not have risk controls to prevent people from accessing the drilling platform during operations. In one case, drilling operators could not readily provide personal danger locks for isolating their rigs even though mine procedures required them to shut down and isolate if gas monitors detected any gas.

Guarding standards at mine sites regarding conveyors generally included compliance to AS4024.36.10 and 11 in safety management systems. Field observations revealed only partial compliance due to:

- guards with excessive gaps that did not prevent persons from accessing rotating elements
- broken mountings and guards not secured properly

- non- effective guarding from damage
- guarding compromised by corrosion due to a build-up of wet fines
- guards did not protect against contact with nip points at head rollers, tail ends scrapers and loop take-ups
- perimeter fencing at conveyor gantries that did not have proper signs requiring isolation of the conveyor before accessing. Some had authorised access only, which failed to protect that person from the hazard of entanglement.
- barriers missing at head roller chutes preventing people from being hit by stray product. Confined space doors were left ajar allowing product to exit the transfer chute.
- personnel access ways under conveyor gantries not having effective guarding on return rollers up to a height of 2.7 m or barricading to prevent entry
- poly/plastic guarding that created a risk. Fitted to a reclaim tunnel conveyor, the mine operator failed to consider potential toxic products of combustion produced by the material if it caught fire.

## Recommendations

Mine operators should review site risk assessments for mechanical engineering control plans to include hazards associated with entanglement. Site mechanical engineering control plans and safeguarding of plant and equipment procedures must be updated to include and implement identified risk controls from that review. When conducting the review, the following should be considered:

- Ensure that people who have regard for the identified hazard are included in the risk assessment team.
- Ensure that company-wide generic safety management systems have been reviewed against NSW legislation and updated with additional information specific to site hazards and risk controls.
- Ensure that identified hazards and risk controls in risk assessments are mapped back into the mine safety management system and principal control plans and where applicable procedures are updated accordingly.
- Compliance with site safety management systems should be robust enough to account for changes in management team staff.

- Ensure that contractor safety management systems have identified the hazards associated with the risk of entanglement and implemented risk controls to prevent harm to people.
- When conducting risk assessments:
  - consideration must be given to appropriate codes of practice, standards, and industry guidelines
  - a list of known risk controls should be included to remove the repetition and focus on the risk controls regarding each identified hazard.
- Safeguard machinery documentation should detail isolation points and emergency stops including the design, functionality, placement, maintenance, and verification requirements.
- Safe-standing and barricaded zones should be defined in safeguarding procedures. Workers should be trained in their use and supervisors should ensure that they are implemented and effective.
- Ensure that inspections of plant and equipment identifies effective risk controls in line with the procedures and that people are empowered to shut down operating plant if the risk controls are no longer effective and create a danger. Plant or equipment should not be operated if there is an entanglement risk until it is made safe.
- A review of training for workers should be done to ensure they can identify the hazards associated with entanglement including excessive gaps, ineffective guarding, missing signs, broken mountings, damage, corrosion, unprotected nip points, barricades, safe standing zones and guarding of rollers above access roadways.
- Ensure that fitted guards do not create a hazard, such as becoming a product of combustion from poly/plastic guards in the event of a fire.

## Introduction

The NSW Resources Regulator's planned assessment programs provide a planned, risk-based and proactive approach to assessing how effective an operation is when it comes to controlling critical risk. These programs apply the following principles:

- a focus on managing prescribed 'principal hazards' from the Work Health and Safety (Mines & Petroleum Sites) Regulation 2014
- evaluation of the effectiveness of control measures implemented through an organisation's safety management system, and
- consideration of the operation's risk profile.

The objective of risk profiling is to identify the inherent hazards and the hazard burden that exist at individual operations in each mining sector in NSW. The information is then used to develop the operational assessment and inspection plans that inform the program.

## Scope

Planned inspection programs include two assessment types:

- Targeted assessments, incorporating:
  - a desktop assessment of:
    - compliance against legislation with respect to the management of health and safety risks associated with entanglement – see **Appendix A** for details
    - the definition of the controls the mine utilises to prevent and mitigate the risks to health and safety associated with entanglement.
  - a workplace assessment of the implementation of those controls through the inspection of plant and worker interviews.
- Planned assessments, which involve a workplace assessment of the implementation of controls through the inspection of plant and worker interviews only.

## The process

The process for undertaking an assessment under a planned inspection program generally involves the following stages:

- Preliminary team meetings, preparation and review of documents
- Execution of an on-site assessment involving:
  - an on-site desktop assessment of relevant plans and processes measuring legislative compliance of the relevant plans (targeted assessments only)
  - the inspection of relevant site operations (both targeted assessments and planned inspections)
- discussion and feedback to the mine management team on the findings and actions that need to be taken by the mine operators in response.

# Assessment findings

## Threats, consequences and controls assessed

### Threats

#### 1. Engagement with moving parts

- **Critical control:** PC 1.1 – Equipment safeguarding.
  - **Control objective:** Guards prevent people accessing entanglement hazards.
  - **Performance requirement:**
    1. Entanglement hazards are identified.
    2. Access to entanglement hazards is prevented by equipment safeguarding.

When acquiring plant and equipment through purchase or hiring, mine operators should ensure that consideration has been given to safeguarding against the risks associated with entanglement. Legacy plant and equipment must be reviewed to ensure that hazards associated with safeguarding requirements have been identified, that risk controls are implemented and maintained to ensure they remain effective against the risk of entanglement. Mine operators must develop a rigorous program of inspection, testing and maintenance of safeguards for the hazard and ensure it is included in the safety management system. Issues found include:

- safeguarding against the hazard of entanglement was missing, had excessive gaps, was damaged or poorly maintained and yet plant or equipment was still being operated. Examples of plant and equipment included pumps, crushers, conveyors, scrapers, head rollers, transfers, tail rollers, hydraulic breakers, gearboxes, and mobile plant.
- inspection and testing of safeguards that were ineffective because of poor acceptance of site criteria by workers and supervisors who conducted them. There was an unwillingness to shut down plant and equipment because of poorly designed or maintained safeguards.
- reporting defective safeguarding of plant and equipment was often found to be lacking urgency and not followed through in a timely manner.
- documentation was missing references to NSW legislation and relevant Standards such as AS4024 safeguarding of plant and equipment and AS 4024.36.10 and 11 specifically for safeguarding conveyors.

- signs were missing or incorrect on key areas of plant and equipment that required isolation of energy sources before removing guards. Incorrect signs included authorised access only, which still placed the authorised person in danger of entanglement.
  - Emergency stop lanyards on conveyors were positioned behind guarding or damaged that made them inaccessible and ineffective. Some were positioned and anchored at an inaccessible height.
  - safety doors at confined space areas on conveyor transfer chutes were found open.
  - poly/plastic guarding installed did not have the products of combustion (toxic fumes) considered for added risk controls.
  - pedestrian access under overhead conveyors was found without guarded return idlers under 2.7 m and there were no barriers set up to prevent people traversing under them.
  - coil springs on vibratory feeders were without guarding to prevent a nip injury if people placed their fingers into the coils.
- **Critical control:** PC 1.2 – Safe standing zones.
- **Control objective:** People remain a safe distance from unguarded entanglement hazards.
  - **Performance requirement:**
    1. Entanglement hazards are identified.
    2. People comply with safe standing zone requirements.

Mine operators did not identify directly with the term safe standing zones, instead referring to such areas as no-go or barricaded zones. When conducting risk assessments and developing the safeguards for plant and equipment procedures, consideration should be given to identifying areas that required perimeter fencing or barricading to prevent entry while in operation. Mine operators should also review training to include identifying areas that contained the hazards relating to the risk of entanglement and to assess risk controls to be implemented to prevent people from accessing the area. An example seen was during mechanical function testing of mobile plant where workers often failed to use barriers including barrier tape, bollards, and information tags to alert people not to enter.

## 2. Unexpected movement of machine parts

- **Critical control:** PC 2.2 – Isolation standards.
  - **Control objective:** Prevent equipment starting while people are working near entanglement hazards.
  - **Performance requirement:**
    1. Entanglement hazards are identified.
    2. Plant cannot start when people are working near entanglement hazards.

Isolation standards varied from site to site. Common risk controls included the use of personal isolation locks without tags and group or complex isolations involving a variety of lock boxes and tag boards. Isolating plant and equipment was implemented in some fashion on all sites. Identifying risk controls for hazards associated with entanglement were often not specific to the hazard, but a by-product of the isolation and dissipation of energies procedures. Most sites had developed isolation permit systems and tools were readily available such as personal locks, lock boxes and hasps. This included identification and dissipation of all energy sources.

Issues identified during the assessment included:

- site procedures that nominated isolation tags only but in practice the site always required isolation locks
- isolation procedures that did not include a formal process for handover to an oncoming shift or managing a situation if the isolation officer had to leave site unexpectedly
- signs that required isolating plant before removing guards was not in place or wrong, signs were used that directed authorised people access only, which exposed them to rotating elements
- a lack of training workers in the site isolation procedures
- workers had not verified effective isolation when locking onto group isolation but relied totally on the system. They were unable to describe the correct colour of the group isolation locks they were working under.
- isolating plant that did not show up on the operator’s graphical user interface screen as being isolated.

When acquiring plant and equipment, sites must identify isolation and methods of dissipation of all energies associated with entanglement when conducting their operational risk assessments and before introduction to site.

## Consequence:

### 1. Physical trauma fatality

- **Critical control:** MC 1.2 – Emergency stops.
  - **Control objective:** Enable stopping of the plant in the event a worker becomes entangled.
  - **Performance requirement:**
    1. Entanglement hazards are identified.
    2. Emergency stops are available and ready for use in the event of an entanglement.

Before introduction to a mine site, the design of all plant and equipment must include and be fitted with a means to bring it to a complete stop in the event of an emergency. Characteristics and types of emergency stops should be identified through a risk-based approach that must include compliance with NSW legislation. The characteristics include being coloured red, when activated must not restart the plant or equipment without the need to reset a control, and signs to show the location and indicate that it is an emergency stop. Mine safety management systems should contain the functionality of emergency stops training requirements and periodic maintenance and testing regimes for their continued effectiveness.

All mine operators must develop and implement site standards that identify and implement emergency stop functions for plant and equipment. Types of emergency stop controls include push buttons that self-latch, e-stops, pull lanyards and hydraulic valves.

Emergency stop issues identified during the site assessments included:

- functionality, types or locations were not included in mine safety management systems
- conveyor tail ends and head rollers areas did not have access to emergency stops
- conveyor lanyards pinned behind guards or damaged from rubbing on structures
- lanyards behind barricades making them inaccessible
- missing or illegible signs
- exclusion from mine maintenance or testing programs
- crushers and pumps that did not have ready access to emergency stops.

## Findings by mine

Figures 1 and 2 present aggregate assessment findings by critical control, providing a summary view of the status of each mine’s hazard management processes. Importantly, the system recognises the value of fully implemented and documented controls by awarding an additional point if both elements were assessed as present. More details explaining the assessment system are found at Appendix B.

Figure 1. Assessment findings for the planned inspection program – Entanglement – Metalliferous Mines & Tier 1 quarries – Overall results < 85%

Location	Threat			Consequence
	1. Engagement with moving parts		2. Unexpected movement of machine parts	1. Physical trauma fatality
	PC1.1	PC1.2	PC2.2	MC1.2
	Equipment safeguarding	Safe standing zones	Isolation standards	Emergency stops
Mine A	Red	Red	Yellow	Green
Mine B	Red	Red	Yellow	Green
Mine C	Red	Orange	Yellow	Yellow
Mine D	Red	Green	Orange	Yellow
Mine E	Red	Orange	Yellow	Green
Mine F	Red	Orange	Yellow	Green
Mine G	Red	Yellow	Yellow	Green
Mine H	Red	Yellow	Yellow	Green
Mine I	Red	Yellow	Yellow	Green
Mine J	Red	Orange	Green	Green
Mine K	Red	Orange	Green	Green
Mine L	Red	Yellow	Yellow	Green
Mine M	Red	Green	Yellow	Yellow
Mine N	Yellow	Red	Orange	Green

- Green (=100%)
- Yellow (>= 80% and <100%)
- Orange (>= 65% and <80%)
- Red (<65%)

Figure 2. Assessment findings for the planned inspection program – Entanglement – Metalliferous Mines & Tier 1 quarries – Overall results ≥ 85%

Location	Threat			Consequence
	1. Engagement with moving parts		2. Unexpected movement of machine parts	1. Physical trauma fatality
	PC1.1	PC1.2	PC2.2	MC1.2
	Equipment safeguarding	Safe standing zones	Isolation standards	Emergency stops
Mine O	Red	Yellow	Yellow	Green
Mine P	Red	Green	Green	Yellow
Mine Q	Red	Green	Yellow	Yellow
Mine R	Red	Green	Yellow	Green
Mine S	Red	Yellow	Green	Green
Mine T	Red	Yellow	Green	Green
Mine U	Red	Yellow	Green	Green
Mine V	Green	Yellow	Yellow	Green
Mine W	Red	Green	Green	Green
Mine X	Yellow	Green	Green	Yellow
Mine Y	Yellow	Green	Green	Yellow
Mine Z	Red	Green	Green	Green
Mine AA	Yellow	Green	Green	Green
Mine AB	Yellow	Green	Green	Green
Mine AC	Yellow	Green	Green	Green
Mine AD	Green	Green	Green	Green

- Green (=100%)
- Yellow (>= 80% and <100%)
- Orange (>= 65% and <80%)
- Red (<65%)

## Notices issued

Of the 30 sites assessed under the inspection program, 29 separate mine operators were given notices about the hazards and risks of entanglement while some mine operators were given notices about other matters. For the purposes of this report, contraventions about other matters were removed from the analysis. The notices issued for entanglement were examined in detail and Table 2 below lists the notices issued by type and details.

*Table 2. Notices issued for the planned inspection program – Entanglement - Metalliferous Mines & Tier 1 quarries*

NOTICE TYPE	TOTAL ISSUED	NUMBER OF MINES
S.195 prohibition notice	-	-
S.191 improvement notice	37	21
S.23 notice of concerns	24	24
<b>Total</b>	<b>61</b>	<b>29</b>

Of the combined 61 notices issued, there were some common themes that were apparent throughout the program plan. Table 3 summarises the type of contraventions. These themes can be related to the critical controls outlined previously and identify some trends there were of concern.

Table 3. Notices issued - categories of concern

**IDENTIFIED CONCERN CATEGORY**

Identify all guarding that does not fully prevent people from coming into contact with rotating elements. Develop and implement risk controls to prevent people from coming into contact with rotating elements of the plant and equipment.

Review conveyor guarding and identify all guarding that does not allow ready access to conveyor emergency stop lanyards. Identify and implement risk controls that allow people ready access to emergency stops lanyards.

Provide guarding that is consistent with site standards of engineering practice to water pumps. Provide guarding that is consistent with site standards of engineering practice to exposed rotating shafts. Review and, as necessary, modify guarding to be compliant with site standards of engineering practice.

Retrain workers in the sites' guarding standards.

Retrain workers in the mines' defect reporting processes.

Ensure the safe operation of the emergency lanyard and guarding is fitted so workers are not exposed to the risk of entanglement.

Install guarding to cover return idlers in reach of the ground on conveyors.

Install safeguarding to cover the gearbox output shaft.

## Further information

For more information on safety assessment programs, the findings outlined in this report, or other mine safety information, please contact the NSW Resources Regulator:

CONTACT TYPE	CONTACT DETAILS
Email	<a href="mailto:cau@regional.nsw.gov.au">cau@regional.nsw.gov.au</a>
Incident reporting	To report an incident or injury call 1300 814 609 or log in to the Regulator Portal
Website	<a href="http://www.resourcesregulator.nsw.gov.au/">www.resourcesregulator.nsw.gov.au/</a>
Address	NSW Resources Regulator 516 High Street Maitland NSW 2320

## Appendix A. Legislative requirements and published guidance relating to the principal hazard entanglement

The following is a list of certain legislative requirements for the management of entanglement risks referred to in this report, as provided by the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 and Work Health and Safety Regulation 2017.

### Work Health and Safety (Mines and Petroleum Sites) Regulation 2014

#### 44A Operation of belt conveyors

- (1) In complying with clause 9, the mine operator of a mine must manage risks to health and safety associated with the operation of belt conveyors at the mine.
- (2) In managing risks to health and safety associated with the operation of belt conveyors at the mine, the mine operator-
  - (a) must ensure that all belt conveyors are fitted with an emergency stop system, and
  - (b) must have regard to all matters relevant to risks associated with the operation of belt conveyors, and
  - (c) must ensure that belt conveyors are regularly inspected by a competent person,

#### 2 Mechanical engineering control plan

- (1) The operator of a mine or petroleum site must, in preparing a mechanical engineering control plan, take the following into account in determining the means by which the operator will manage the risks to health and safety from the mechanical aspects of plant and structures at the mine or petroleum site-
  - (b) the reliability of safeguards used at the mine or petroleum site to protect persons from the hazards posed by the plant or structure during each phase of its life cycle,
- (2) A mechanical engineering control plan must set out the control measures for the following risks to health and safety associated with the mechanical aspects of plant and structures at the mine or petroleum site taking into account the matters set out in subclause (3)—
  - (a) injury to persons caused by the operation of plant or by working on plant or structures,

- (c) the unintended operation of plant,
- (d) the unintended release of mechanical energy,
- (3) The following matters must be taken into account when developing a control measure referred to in subclause (2)-
  - (d) safe work systems for persons dealing with plant or structures including the isolation, dissipation and control of all mechanical energy sources from plant or structures,

## Work Health and Safety Regulation 2017

### 208 Guarding

- (1) This clause applies if guarding is used as a control measure in relation to plant at a workplace.
- (2) The person with management or control of the plant must ensure that—
- (3) The person with management or control of the plant must ensure that the guarding—
- (4) If the plant to be guarded contains moving parts that may break or cause workpieces to be
- (5) Despite anything to the contrary in this clause, the person with management or control of the plant must ensure—

### 191 Emergency stop controls

- (1) If plant is designed to be operated or attended by more than 1 person and more than 1 emergency stop control is fitted, the designer of the plant must ensure that the design provides for the multiple emergency stop controls to be of the “stop and lock-off” type so that the plant cannot be restarted after an emergency stop control has been used unless that emergency stop control is reset.
- (2) If the design of the plant includes an emergency stop control for the plant, the designer of the plant must ensure that the design provides—
  - (a) for the stop control to be prominent, clearly and durably marked and immediately accessible to each operator of the plant, and
  - (b) for any handle, bar or push button associated with the stop control to be coloured red, and
  - (c) that the stop control cannot be adversely affected by electrical or electronic circuit malfunction.

## Appendix B. Assessment system explained

The NSW Resources Regulator uses a bowtie framework to proactively assess how mine sites manage their principal hazards. Bowties are a widely used risk management tool that integrates preventative and mitigating controls onto threat lines that relate to a material unwanted event.

As part of program planning, controls were categorised by the NSW Resources Regulator’s mine safety inspectorate in accordance with the International Council on Mining and Metals handbook. Only controls deemed critical<sup>1</sup> are assessed under a planned inspection program. For a control to be assessed as effective, each of its control supports must be in place and operational.

### Assessment findings results calculation

During the program, each control support assessed at each mine was rated and the findings recorded. Points were awarded depending on whether there was evidence that the control support had been documented and/or implemented. Importantly, the system recognises the value of fully implemented and documented controls by allocating four points if both these elements were present.

For finding outcomes, points were awarded for each control support identified within a critical control. An overall assessment result for the critical control was then calculated as a proportion of the maximum possible points for that critical control. For example, if a critical control comprises 10 control supports and 5 were assessed as fully implemented (documented and implemented) and 5 were found to be not documented and not implemented then the overall assessment result for that critical control would be 50%.

Table 3. Finding outcome and points

FINDING OUTCOME	POINTS
Documented and implemented	4
Implemented but not documented	2
Documented but not implemented	1
Not documented and not implemented	0

Critical control calculations also took into account instances where control supports were not applicable to the mine being assessed or when control supports were not able to be assessed during a site visit.

<sup>1</sup> Critical Control Management Implementation Guide, International Council on Mining and Metals (ICMM), 2015.

The overall assessment result for each critical control has been assigned a colour based on the assessment bands presented in the table below. The colour band results are then used to identify industry focus areas requiring improvement.

*Table 4. Assessment results and colour code*

CRITERIA	COLOUR
An assessment result of 100% of possible points	Green
An assessment result of $\geq 80\%$ but $< 100\%$ of possible points	Yellow
An assessment result of $\geq 65\%$ but $< 80\%$ of possible points	Orange
An assessment result of $< 65\%$ of possible points	Red