

AUSMITE

Bulkan North Mine Site

Standard Operating Procedure

SOP-270.01 Working at Heights

(Training Resource Only)

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1. Introduction

This Standard Operating Procedure (SOP) specifies the minimum requirements for working at heights at the Bulkan North Mine Site in accordance with section 92 of *the Coal Mining Safety and Health Regulation 2017*.

The procedure does not provide for the risks associated with working at heights outside the boundaries of the Bulkan North Mine Site.

This SOP applies to all Coal Mine Workers and visitors at the Bulkan North mine site.

2. Definitions

Term	Definition
Work at height	Work where a fall could result in a significant incident or there is a potential to fall 1.8 metres or more, or gain access to within 2 metres of an open edge from where there is a potential to fall 1.8 metres or more. This includes but is not limited to, conducting work from and on: <ul style="list-style-type: none"> - Ladders - Structures - Work boxes - Elevated work platforms - Scaffolding including incomplete scaffolding - Temporary work platforms
Work at Height Permit	A <i>Work at Height Permit</i> is required for any task that involves work at height as defined above.
Fall Arrest	Form of protection which involves the safe stopping of a person already falling
Fall Restraint	Prevents a person from falling from a height
CMW	A coal mine worker which for the purpose of this SOP includes contractors and visitors.

Table 1: Definitions

3. Competencies / Authorisation

Personnel who authorise or conduct work at height must be trained in the task or tasks applicable to their role as per the competencies listed in Table 2: Training and competency requirements (or recognised equivalents).

Authorisation	Competency or licence code
Conduct Work at Heights	RIIWHS402D – Work safely at heights
Elevated Work Platform Operation	RIIHAN301D Operate elevating work platform
Permit to Work	✓
Working at Heights SOP	✓

Table 2: Training and competency requirements

Refresher training for Work Safely at Heights must not exceed two years.

4. Equipment

Equipment Requirements

Workboxes / work baskets used to raise personnel must be designed to **AS 1418 (series) – Cranes - Design and specification**.

Scaffolding must comply with **AS/NZS 4576 Guidelines for scaffolding** and the **AS/NZS 1576 Scaffolding series**

Fall restraint system equipment must conform to the requirements of **AS/NZS 1891.2 – Industrial fall-arrest systems and devices – Part 2: Horizontal lifeline and rail systems**.

Harnesses, belts, lanyards and associated equipment must comply with the requirements of **AS/NZS 1891 (series) – Industrial fall-arrest systems and devices**.

- All Karabiners and other types of snap-hooks must, as a minimum, have a secondary locking mechanism
- Twin tail lanyard meets **AS1891.1 (2007): Industrial fall-arrest systems and devices - Harnesses and ancillary equipment**.

Anchor points, lines and rails, both permanent and temporary, must comply with the requirements of **AS/NZS 1891 (series) – Industrial fall-arrest systems and devices**.

Inspection, Maintenance, and Repair

Working at height equipment must be inspected prior to each use by a trained and competent person.

The following equipment must be removed from service and quarantined with an Out-of-Service tag attached:

- Damaged
- Faulty
- Out-of-certification
- Been modified from OEM specifications without authorisation
- Has had unauthorised maintenance carried out on it
- Any equipment that has been exerted to arresting a fall.

All equipment must be inspected as per inspection dates

Permanent anchor points must be visually inspected at regular intervals as detailed in **Error! Reference source not found..**

Drilled-in anchor points must be proof tested (load tested) annually by an approved load testing authority

Quarter	Period	Comments
Q1	January – March	Maintenance and repair of fall protection equipment must only be undertaken by the OEM or their appointed agent. <i>A transition period of ± 2 weeks is permitted between inspection periods.</i>
Q2	April – June	
Q3	July – September	
Q4	October - December	

Table 2: Inspection periods

5. Preparing for Work at Heights

Planning – Hierarchy of Controls

Planning and scheduling of work at height shall adopt the following hierarchy of preferential controls:

1. Eliminate the need. If possible, undertake the task at ground level
2. Fall Protection: Engineered hard barrier such as scaffold, scissor lift or EWP basket
3. Fall Restraint: Preventing access to an open edge such as retractable lanyard, static line or fixed lanyard
4. Fall Arrest: Equipment used specifically to arrest a fall from height

Risk Assessment

Prior to conducting any work at height, a JSA must be completed. The JSA must be attached to the Working at Height Permit.

Work at Height Permit

A Work at Height Permit is required for any task as defined in Section 3 above.

The applicable JSA must be attached to the Working at Height Permit

Rescue Plan

Work at height that applies either Fall Restraint or Fall Arrest controls must be supported with a Rescue Plan.

When preparing a Rescue Plan, consideration must be given to the following:

- The nature and location of the task
- The location and immediate availability of the rescue equipment required
- The means of access to any part of the area below where a fall may occur
- The capabilities of the rescuers

The Rescue Plan must be communicated to all members involved in the particular working at height task.

Drop Zones

Where overhead work is being performed and there is a risk of equipment, materials and/or tools falling from the elevated position, an appropriate drop zone must be established with appropriate barricading, delineation and signage. See **Ausmite Barricading and Access Control** that defines the extent of required “drop zones” based on risk.

Attention must be given to multiple levels if applicable.

Tool lanyards should be used where possible to further protect personnel from falling objects.

6. Work at Height Controls

Work on the Ground or on a Solid Construction

Solid construction means an area that:

- Is structurally capable of supporting workers, material and any other loads applied to it
- Has edge protection, including toe boards, around its perimeter and around any openings through which a person, material or tools could fall
- Has an even, accessible surface and gradient
- Has a safe means of entry and exit

Scaffolding

Any form or configuration of scaffolding shall only be erected, altered and dismantled by a competent and authorised person.

Any scaffold from which a person or object could fall more than four metres must only be erected, altered and dismantled by or under the direct supervision of a licensed scaffolder.

Scaffold shall be inspected by a competent person each week and additionally, following any form of modification or alteration.

Elevating Work Platforms (EWP)

EWPs must be operated with consideration of the provisions outlined in **AS 2550 (series) – Cranes, Hoists and Winches - Safe use**.

Personnel operating an EWP must be deemed competent as per Section 3. **Competencies / Authorisation**, Table 2 above.

Workboxes / Work Baskets

Workboxes / work baskets must be operated with consideration of the provisions outlined in **AS 2550 (series) – Cranes, Hoists and Winches - Safe use**.

For the use of workboxes / work baskets suspended from a crane, refer to **SOP-284.01. SOP Lifting Operations**.

Fall Restraint Systems

Personnel conducting work using a fall restraint system must remain connected to an anchor point at all times. Use of a double or adjustable lanyard may be necessary to comply with this requirement.

A Twin Tail Lanyard – that is a lanyard with two means of attachment sewn or connected to a single yoke – is not permitted under any circumstances.

Where only one lanyard is required to be attached to an anchor, the second lanyard should be attached to the same or another anchor point or to a tool hook or similar on the harness. The second lanyard shall not be wrapped around the person's body, hooked onto the harness webbing or lanyard attachment point.

Industrial Rope Access Systems

Industrial rope access systems are only considered practical for specialised personnel specifically trained in its use, e.g. emergency rescue personnel.

Guidance on the use of industrial rope access systems is available in **AS/NZS 4488 (series) – Industrial rope access systems**.

Fall-Arrest Systems

Personnel conducting work using a fall-arrest system must remain connected to an anchor point at all times. Use of a double lanyard (e.g. working from an EWP) or an adjustable lanyard (e.g. working on a roof) may be necessary to comply with this requirement.

Full body harnesses must be used with fall-arrest systems.

Anchorage systems that have been used in arresting a fall must be tagged out-of-service until inspected by a competent person in accordance with **SOP-124.01. SOP Isolation and Tagging**.

Shock absorbing lanyards must not be used in conjunction with inertia reels.

Ladders

Extension or single ladders should generally only be used as a means of access to or egress from a work area.

They should only be used as a working platform for light work of short duration that can be carried out safely while maintaining three (3) points of contact on the ladder.

Appendix: Summary of Key Points

-  Any work at height that involves Fall Restraint or Fall Arrest requires that a JSA, Rescue Plan and Work at Height Permit is completed and authorised PRIOR to commencing work
-  A Work at Height Permit is only valid for the task specified on the Permit and for the duration specified
-  A Spotter and Drop Zone delineation shall be maintained for the duration of the work at height
-  Work and task planning shall consider the hierarchy of controls and apply “reasonably practicable” measures to eliminate or reduce the risk so far as is practicable
-  Only those persons deemed competent through training and assessment shall undertake any form of work at height
-  All fall protection PPE shall be subject to a visual inspection by the wearer each time it is donned
-  Any fall protection PPE that is damaged, degraded, unserviceable or has been subject to a “fall” (from any height) shall immediately be removed from service and quarantined until it can be returned to the supplier for inspection and testing
-  Anchorage systems that have been used in arresting a fall must be tagged out-of-service until inspected by a competent person
-  Shock absorbing lanyards must not be used in conjunction with inertia reels
-  Twin Tail Lanyards (two means of attachment sewn or connected to a single yoke) is not permitted to be used under any circumstances
-  Use of a ladder as a means of access or a working platform for light work of short duration requires the worker to be able to maintain three (3) points of contact on the ladder at all times

Ausmite Worker / Contractor Declaration of Compliance

I (Print Name) _____ declare that I have read and understood the requirements and procedures of this Ausmite Bulkan North Mine Site SOP being document number and title: **SOP-270.01 Working at Heights.**

I acknowledge that while performing any work on the Ausmite Bulkan North mine site, I must comply with all aspects of this SOP. I understand that failure to comply with this SOP may result in me being escorted from the work site with re-admission and/or approval to continue work duties being at the sole discretion of Ausmite management.

Signature: _____

Date: _____

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