CRITICAL RISK STANDARD

Prevention of falls and dropped objects

Perenti

1. INTENT

This standard identifies the controls required to manage the risk associated with personnel required to work at height or operate mobile equipment that may fall into vertical openings.

2. APPLICATION

This standard applies to all Perenti Group Projects wherever the risk of aperson, object or occupied equipment falling cannot be eliminated and applies to all work conducted at height or near an open edge.

The preferred approach to the prevention of falls from height is to eliminate the need for the activity to occur at height through equipmentdesign or engineering changes. Should this not be possible or practicablethe hierarchy of PPE control to be used within Perenti is as follows:

- fall restraint techniques (preventing access to an edge where a fallcan occur);
- limited free fall technique (where if a fall occurs it is arrested within 600mm);
- fall arrest (where more than a 600mm fall is possible).

Throughout this standard, a reference to a safety barricade means a permanent or temporary physical device (or devices) including looselyplaced rock (i.e. bund) where access across or past the barrier is deliberate and cannot be considered inadvertent or accidental.

3. REQUIREMENTS

3.1 PEOPLE

- Anyone required to work at height, including in an EWP or near a vertical opening must hold an Australian nationally recognised safework at height competency or an international equivalent. Where no international equivalent exists person must be trained to an equivalent level of competency through either internal or external training programs.

3.2 SYSTEMS AND PROCEDURES

- Anyone working at height must not work alone.
- The use of Fall Arrest PPE requires specific approval from the Project Manager or their delegate.
- Any time Fall Arrest is used a working at height permit shall be issuedand a specific emergency response plan must be developed and communicated to all participants and project-based emergency services.
- An emergency response plan that includes working at height risks as identified in either the project risk assessment or the JSA specific for the task must be readily available in the workplace when work atheight is conducted (the plan must include plan activation, standbyequipment if applicable, emergency procedure).
- No person is allowed within three metres of an unprotected openedge such as a stope or vertical opening without the use of fall restraint equipment.
- Standard work procedures must be in place for the correct donning,use and operation of personal fall protection equipment.
- Fall protection equipment (full body harness, lanyards and attachmentdevices) must be issued to individuals required to work at height whothen become accountable for its proper storage and maintenance whilst in their possession.
- While working at height, personnel must wear a full body harness attached to an adjustable lanyard which is securely attached to a rated anchor point or static line. The adjustable lanyard must be adjusted to prevent the person from reaching an edge from whichthey can fall.
- Fall protection equipment must be inspected quarterly by a competent person, tagged or otherwise identified to confirm the lastinspection and period for use and recorded on a register.
- Fall protection equipment must be inspected by the user immediatelyprior to and after use. Defective equipment must not be used.
  Defective equipment must be removed from service, have an out of service tag attached and be quarantined for further inspection ordisposal.
- There must be a system to manage the risk of objects (such as tools, materials, debris and build-up, spillage or overflow, etc.) falling ontoor striking persons below or in adjoining areas. The system must consider controls such as:
  - concurrent work activities and segregation controls;
  - design and installation of prevention systems such as securing, screening and edge protection;
  - use of appropriate storage, transfer and retention devices fortools, e.g., lanyards, grommets, tool buckets;
  - design and installation of catch netting, overhead structures, loadrated decking, etc.;
  - exclusion zones that protect the potential drop and bounce zonesthrough the use of barriers, barricading, demarcation and signs.
- Three points of contact must be maintained when climbing and descending ladders, or during access to and egress from plant.
- Where three points of contact cannot be maintained (e.g. workingfrom a ladder in an escapeway) fall prevention measures must beapplied.
- Standard work procedures for routine work must indicate tasks wherea fall hazard exists and the controls that are to be applied.

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- Whilst involved in work at height activity, Elevated Work Platform (EWP) baskets attached to Integrated Tool Carriers (IT) must have thelocking pins involved in the task.
- Procedures for the operation of an EWP must define the communication process between operator and person in the work platform. No movement of the controls by a person not located in thebasket is to take place unless in accordance with approved Business unit specific approved procedures.
- All work in an EWP requires the presence of a dedicated spotter competent to raise an emergency alarm and lower the EWP shouldan emergency arise. In the case of an EWP basket fitted to an IT or equivalent the spotter may be the IT operator.
- Permanent and temporary anchor points must be designed and installed according to an engineering standard.
- Permanent anchor points must be recorded on a register and undergo a documented inspection by a competent person at leastannually.
- Temporary anchor points must be removed once the planned workis complete.
- Personnel must not climb onto or work from loader buckets, forks, machine booms, the cabin roof of any mobile equipment or any other structure that is not a designated work area/work platform. This includes the trays of light vehicles or decks of road going trucks,except when edge fall protection is in place.
- No work is to be conducted from a portable ladder with exception ofplatform ladders designed for this purpose.
- Open edges and open holes must have a safety barricade and appropriate signage placed to warn personnel of the hazard present.
- When loaders and trucks are required to tip over the edge of a verticalopening underground an engineered safety wheel stop must be installed until a rill is established. A Shift Supervisor must inspect the work area prior to authorising a travelling bund arrangement.
- Engineered wheel stops/barriers for mobile equipment must undergoperiodic inspections to ensure integrity of the wheel stop.
- Loaders and trucks on the surface must only tip over the edge ofa dump that has clearly identified windrows established for this purpose.
- Lighting must be provided at the tip edge.
- Any safety barricade designed to stop vehicle access must be at leastthe half the wheel height of the largest mobile equipment that will work in the area. The width of the barricade must prevent all vehicularaccess beyond the barricade. A minimum height and depth of 1 meteris required.

3.3 PLANT AND EQUIPMENT

- All fall prevention equipment must be designed, purchased, and maintained in accordance with relevant approved design standardsand manufacturers recommendations for its intended application.
- Only full body fall arrest harnesses (with anti-suspension traumastraps) are to be used for work at height.
- Lanyards must be securely attached to the harness manufacturer's designated attachment points and not to any strap or webbing component that is not designed for this purpose.
- Harnesses, when worn for work at height must be securely attached to a shortened adjustable rope lanyard or retractable inertia reel withshock absorber built in and attached to an approved anchor point.
- A twin tailed lanyard must be used instead of two separate lanyardsif personnel are required to move from one surface to another and remain anchored at all times.
- Lanyards must be attached to a suitable anchor point using a triple action karabiner or double action snap-hook and not back-hookedaround a structure onto itself.
- Single anchor points must be engineered to meet a minimum ultimate strength of 15kN for one person or 21kN for a maximum oftwo people.
- All EWP work baskets must have crush protection utilising operator protective structures, electronic warning devices, retraction devices or other protection technologies that prevent an operator becomingtrapped between the basket and structures overhead.
- Where plant is fitted with an approved access system (e.g. mechanised stairway), that system must be used as the primary method for access and egress.
- Where personnel need to gain access to places at height on large plant and mobile equipment (e.g. to clean windscreens or filters), access ways must be provided or such tools and equipment to enablecompletion of the task from the ground.
- Stands and portable work platforms over 600mm in height require fall prevention measures (e.g. handrails).
- Access ladder ways, handrails and self-closing gates must be in good condition, regularly inspected and maintained.
- Mobile equipment fitted with fold up/down handrails must have these items maintained in good condition such that they can be usedduring access.
- Structures, equipment, securing devices and fixtures that support or store objects at height must be engineered, designed and installed tosupport the applied load.
- Racking must be designed for the load, suitably identified with theSWL, inspected for integrity and the stored material secured to prevent unintended movement.