



## CRITICAL RISK STANDARD

# Mobile equipment operation and interaction

## 1. INTENT

**This standard identifies the controls required to manage the risks associated with mobile equipment operation and interaction.**

## 2. APPLICATION

This standard applies to all Perenti group personnel, including contractors, who operate or are working around mobile equipment at any Perenti group project. Mobile equipment covered by this standard includes underground and surface earthmoving equipment, light vehicles, flatbed trucks and ancillary equipment such as forklifts, IT's and telehandlers.

## 3. REQUIREMENTS

### 3.1 PEOPLE

- A person must be authorised and certified as competent, possess the required statutory required licenses (e.g. High-Risk Work Licenses for forklifts and cranes etc) or be formally classified as 'in training' before operating any mobile equipment.
- A pre-start inspection must be conducted and recorded by the operator before operating mobile equipment.
- If a fault with a critical function is detected, the equipment must be tagged out of service and not be operated until the fault is rectified.
- A seat belt must be worn by any person operating or travelling in any mobile equipment. It is the driver's responsibility to ensure all personnel are always wearing their seatbelt.
- Cargo must not be transported inside the cabin of a vehicle, except for small personal items which must be secured away from controls (e.g. crib bags, document folders, plod devices and water bottle).
- Cargo or loads transported on vehicles must be stowed or restrained to prevent movement or placed in an approved carrying device (e.g. rock bolts in a rack).
- Cargo or loads must be contained within the sides of designated cargo space on the vehicle; any load overhanging > 1 metre to the rear must have a red flag attached.
- When operating mobile equipment designed to be driven on public roads, such as light vehicles and flatbed trucks, the operator must hold a current state/jurisdictional drivers' licence for that class of vehicle.

### 3.2 SYSTEM AND PROCEDURES

- Each project must have a completed formal risk assessment in place that covers mobile equipment operation, maintenance and traffic management.
- A project-specific, risk-based Traffic Management Plan that is approved by the Project Manager (or equivalent) must be in place at every Perenti Group project.

- The traffic management plan, as a minimum, must include requirements for:
  - Road design, including layouts, construction, signage, speed limits, windrows and berms, right of way, traffic and pedestrian segregation, heavy and light vehicle segregation and intersection management;
  - Road maintenance, including dust mitigation/dust suppression;
  - Road rules including control of access to restricted traffic areas, standards for safe following distances, mobile equipment hierarchy/right of way, interaction management and overtaking;
  - Communication protocols and mechanisms to ensure positive communication;
  - Parking;
  - Standards and controls for berms and tip heads;
  - Change management process for traffic changes;
  - Extreme weather;
  - Emergencies and breakdowns; and,
  - Inspection regimes for operational areas, workshops, service bays and travel ways.
- A formal training program to ensure competency for each type of mobile equipment is achieved, verified and maintained must be provided.
- The pre-start system must distinguish between critical and non-critical items. Pre-start checklists for all mobile equipment must clearly identify the critical safety features for that specific item of mobile equipment. All features identified as critical must be in place and in good working order prior to and during operation.
- Spotters must be used when it is required to manoeuvre heavy mobile equipment in areas of high traffic volume/congestion and where a pedestrian interface exists or is likely, such as in and out of workshops.
- Where spotters are utilised, they will only perform spotting tasks and communicate with the operator of the equipment using pre-planned and agreed communication protocols and equipment.
- All vehicles must be maintained in accordance with specified maintenance schedules, recommended OEM requirements and the Maintenance of Mobile Equipment Critical Risk Standard.
- Each project must have a risk-based journey management procedure that includes routes to be taken including departure and destination, scheduled calls at predetermined times or locations, contact phone numbers, vehicle details etc.



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- Prior to loading or unloading a load that is to be or has been transported to site or transported from site, a risk assessment must be completed to ensure the load:
  - Will not shift, roll, tip over, fall or move once unsecured;
  - Will be stable prior to unloading; and,
  - Will not inadvertently release hazardous substances or chemical energy.
- All transported loads must be restrained or secured with devices that allow the potential stored energy to be released in a controlled manner.

### 3.3 PLANT AND EQUIPMENT

- All new Perenti mobile equipment must conform to the current ISG Business Unit build specification at the time of delivery.
- Mobile equipment is only to be used for its intended purpose(s). The intended purpose(s) of each equipment type must be defined as a component of training manuals and procedures.
- Where mobile equipment is fitted with lifting devices, working load/safe working limits must be clearly marked and adhered to.
- All mobile equipment must:
  - be fitted with lockable main battery isolation point;
  - be fitted with lockable start circuit isolation point.
- In addition, integrated tool carriers must have a hydraulic lockout for the attachment pins.
- Development jumbos must have a hydraulic control switch accessible from ground level.
- All mobile equipment must be fitted with the following means of communication and safe operation:
  - A two-way radio;
  - A horn;
  - Lighting to enable safe operation.
- Underground remote-controlled equipment must have a fail to safe system that shuts off equipment if personnel enter the controlled operating environment (e.g. laser barrier).
- All mobile equipment must have a valid brake test conducted with consideration to the OEM's recommendations and in accordance with AS 2958.1-1995 Earth-moving machinery – Safety Wheeled machines – Brakes (Equivalent - ISO 6292:2008 Powered industrial trucks and tractors — Brake performance and component strength)