

Incident

Re-incident

On Monday 1st June 2020 a contractor was engaged to undertake undercutting work on the main line in Roto NSW.

The work required the use of two hi-rail excavators and one hi-rail tipper truck. One excavator was working directly with the tipper truck boxing up new ballast onto the shoulder of the sleepers.

During the works, the second excavator proceeded behind the first one entering the exclusion zone with no communication to the first excavator or tipper truck. The operator of the first excavator stopped the machine and exited onto the external platform. At the same time the first excavator slewed and struck the operator standing on the platform. The hydraulic ram of the boom struck the chest of the operator pushing him back inside the cab, damaging the window of the cab door and denting the frame of the excavator cab.

The operator did not sustain serious injury as a result of the incident.

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In order to reduce the risks associated with mobile plant on the worksite, you must:

- Allocate a supervisor accountable for the management of mobile plant movement and interaction with other plant, people or vehicles.
- If the allocated supervisor is required to leave the site, another supervisor must be allocated
- Have an agreed and documented method of communication for plant movements that is briefed to the teams.
- Clearly identify and delineate exclusion zones
- Identify designated areas to board/alight from plant to prevent people from entering exclusion zones

In order to reduce the risks associated with mobile plant on the worksite, consider:

- Design the worksite layout to separate mobile plant interaction and people. Ensure traffic is managed with separation by physical barriers where practicable.
- Scheduling works to reduce plant interaction where possible
- Aligned to Safety Alert #105 – specific isolation Machine specific isolation procedures are to be identified and implemented prior to any works being completed on site and plant operators briefed on these specific procedures as well as communications protocols to be followed when required to enter and exit an exclusion zone
- Safe Work Method Statements (SWMS) and Safe Work Breakdowns (where applicable) are to be updated to include requirement for clear communication and authorisation to enter a mobile plant zone. All motions/functions are to be positively isolated, attachments on the ground and in a fundamentally stable position.

Requirements

1. Place Safety Alert on display and make copies of this alert available to people who report to you (without regular email access) and ensure that the contents of the safety alert are discussed/explained to your staff.
2. If engaging contractors, ensure they are made aware of current ARTC Safety Alerts.
3. Ensure a method of sign-off is obtained (eg via tool-box/safety meetings/morning briefings etc) to verify that the Safety Alert has been distributed and discussed.
4. If you have any safety concerns with this Safety Alert, please speak directly to your leader.

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Further information



- All Safety Alerts issued can be [found here](#).
- For further information contact:
 - Cath Bowlzer Principal Advisor Safety and Environment Interstate
 - Brett Teasdale Principal Advisor Safety Hunter Valley
 - Hinea Clark Health and Safety Manager Delivery Inland Rail
 - Mark Blackmore Acting General Manager, Safety and Environment

Site Safety Alert

Reference: 105
Re-issued 15/06/2020

Site Safety Alert: Mobile Plant

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This alert and immediate change to work practices has been issued following a high potential incident where an ARTC worker was struck by a piece of mobile plant after being given approval to access the defined exclusion zone to complete a work-related task.

The motion isolator on the excavator was not engaged by the operator and a control lever was inadvertently actuated whilst the worker was in the exclusion zone resulting in the ARTC maintainer being hit in the head by the machine implements.

Whilst the injury to the worker resulted in medical treatment, there was significant potential for fatal consequences from this and other similar incidents in recent months with mobile plant. As a result the following changes and controls will be implemented immediately for Mobile Plant, including all rubber tyred or track driven mobile plant on ARTC worksites:

Key Message:

No personnel are to enter the swing radius, working radius or exclusion zone of any mobile plant unless all the motions/functions have been positively isolated, or the implements are on the ground and in a fundamentally stable position.

The following points are provided to ensure transparent and clear understanding of the above directive:

- Where functional isolation controls are installed, (lock levers and seat bars) these must be at a minimum tested for effectiveness daily by the operator and noted on the equipment pre-start check in the comments field if not included as a standalone safety critical checklist item. This is to be confirmed by the ARTC Site Supervisor or authorised ARTC representative;
- Where mobile plant does not have any motion/functional isolation controls, then another form of positive motion/function isolation must be implemented prior to personnel entering the exclusion zone. This could include but is not limited to plant being turned off and key removed or the operator exiting the cab (out of reach of hand controls) whenever people are in the exclusion zone;
- Machine specific isolation procedures are to be identified and implemented prior to any works being completed on site and plant operators briefed on these specific procedures as well as communications protocols to be followed when required to enter and exit an exclusion zone; and
- Safe Work Method Statements (SWMS) and Safe Work Breakdowns (where applicable) are to be updated to include these additional risk control measures prior to the commencement of any work involving people and plant interaction on site.

Key Messages:

1. All leaders are to take a key role to ensure that key controls are implemented and that all team members are aware of this safety alert and the importance of managing these controls.
2. If this key control cannot be implemented, then work must not commence until the accountable ARTC Manager has been notified and the risks assessed and effective controls established and recorded to ensure that personnel are not at risk from being struck by mobile plant.
3. If engaging contractors, ensure these key controls are implemented and managed.
4. Ensure a method of sign-off is obtained (e.g. via tool-box/safety meetings/morning briefings etc) to verify that the Safety Alert has been distributed and discussed.

Key Messages:

- All Safety Alerts issued can be [found here](#).
- If you have any safety concerns with this Safety Alert please speak directly to your leader.
- For further information please contact Brett Teasdale, Principal Advisor Safety Hunter Valley, 02 4978 9830 or bteasdale@artc.com.au