Safety Alert

Rotating knocking box fatality

This Alert highlights the potential hazards and risks associated with operating cattle rotating knocking boxes used in the red meat industry.

December 2012

Background

An employee at a red meat producer received fatal crush-related injuries when he became trapped between the pneumatically powered lid of the rotating knocking box (the top wall area of the head restraint and the side wall of the knocking box assembly).

The incident occurred prior to the start of the daily kill. The employee was asked to hose some material out of the knocking box as part of the pre-operational hygiene checks.

Area of the rotating knocking box where the employee became trapped

Contributing factors

- There were no barriers (handrail) in front of the stunner's working position to prevent employees from leaning over the front area of the knocking box.
- There were no barriers (handrail) in place to prevent employees from falling off the raised work platform when carrying out the knocking task.
- The operator's controls were not shrouded or guarded to prevent the controls from being accidently operated.
- There was no secondary safety system in place to prevent the lid of the knocking box closing onto employees when performing cleaning or maintenance tasks.
- The employee was not given any information, instruction, supervision or training regarding the tasks he would be performing as part of the pre-operational hygiene checks on the knocking box.

Control measures

- Ensure operator's controls for the knocking box are marked to indicate their function.
- Use a long electric cattle prod extension to provide greater distance between employees and the animal.
- Install a perspex window in the stainless steel wall on the stunner's working platform, so the stunner and the slaughter person can see each other.
- Ensure the emergency stop button and confirmation button for the slaughter person are further away from the knocking box assembly, to increase the distance between where the slaughter person stands and the hazard area of the knocking box.
- Introduce a timing system between the slaughter person's acknowledgement button and the knocking box rotating controls.
- Wire the emergency stop button so it can isolate only the electrical power to the drive motor of the rotating knocking box drive system. This prevents an animal in either one of the dual knocking box chambers from being released if the emergency stop button is activated (pneumatic system not isolated).
- Ensure the isolation switch for the rotating knocking box disconnects all power sources of the knocking box.
- Ensure guarding is in place to prevent workers reaching into the rear door slide frame area, the chain drive assembly or accessing underneath the rotating knocking box.
- Ensure operator's control buttons are coloured in accordance with Australian Standards.
- Introduce a metal support bar that can be placed in-between the side wall of the knocking box chamber and the lid of the knocking box. It must be capable of being pinned into position if cleaning and maintenance tasks are being conducted.

- Provide such information, instruction, training or supervision as is necessary to enable people undertaking maintenance, stunning or slaughter to perform their work in a way that is safe and without risks to health.

Contact Details

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For more information on occupational health and safety, go to WorkSafe's website: **worksafe.vic.gov.au**