SAFETY ALERT





DUMP TRUCK TRAYS HIT OVERHEAD STRUCTURES

INCIDENT

Two incidents have recently occurred in which the raised trays of large dump trucks hit overhead structures.

In the first incident the tray hit a public road underpass and threw the driver towards the top of the cabin; in the second incident the tray hit an overhead conveyor jamming it between the driver's cabin and the tray.

Neither of the truck drivers were injured. One of the incidents had the potential to result in a fatality.

CIRCUMSTANCES

In both cases:-

- The truck drivers were familiar with the trucks and the site.
- The trucks had been driven with the trays up for at least 100 metres.
- Visibility was good.
- In the first incident the tray became wedged against the roof of the underpass as a result of the impact. The driver's cabin roll-over protection system was also forced into the roof of the tunnel.
- In the second incident the conveyor gantry was carried some distance by the truck. The gantry ended up being jammed between the tray and the driver's cab.

The trucks were being operated on a regular haul route.

INVESTIGATIONS

- 1. Neither of the trucks were fitted with anything to automatically prevent or inhibit movement of the truck whilst its tray was raised.
- 2. In the first incident the driver roll over protection structure was so badly impact damaged that it could not be repaired.
- 3. In the second incident some of the conveyor gantry had to be replaced.

 The raised tray warning light had intermittently not been operating for a considerable period.

RECOMMENDATIONS

- Conduct a site specific risk assessment to identify and control the potential for mobile equipment to hit overhead structures, including power lines, anywhere on the mine site. Consider the increased probability of a truck rolling over if it is driven with the tray up for anything more than a short distance at low speed.
 - Ensure the appropriate heirarchy of controls is utilised.
- 2. Consider installing a suspended or lightly supported clearance frame before any major structure or power lines. The clearance frame should not result in a hazard if it is hit.

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A non-contact sensing/warning system may be a suitable alternative to a clearance frame.

- 3. Fit a device which will automatically stop or inhibit the movement of the truck whilst ever the tray is raised. Refer to MDG15, Guidelines for Mobile and Transportable Equipment For Use at Mines.
- 4. Ensure that every time there is a change in work area that the change in risks is re -assessed before work recommences.
- 5. Implement a system of monitoring to ensure that all personnel wear seat belts. Wearing of seat belts is called up in Australian Standard AS2294.
- 6. Ensure the training of operators and drivers and the management of contractors are adequate to prevent dangerous incidents.
- 7. Use pre start check lists which ensure that the functionality of audible and or visible tray up warning devices are operational and also ensure that tray up truck movement inhibitor systems are operational.

R Regan

ASSISTANT DIRECTOR SAFETY OPERATIONS



1st Incident

- Truck tray jammed in underpass
- Truck wheels off ground

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1st Incident

- Drivers cab jammed against underpass
- Crushed handrails
- 2nd truck used to stabilise elevated truck



2nd incident

- Conveyor gantry jammed between drivers cab and truck tray
- Damaged conveyor, truck hand railing and fire suppression system

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