Mines Safety Bulletin No. 133

Subject: Unloading of poly pipe from vehicles or trailers

Date: 30 November 2016

Background

There have been incidents on Western Australian mining operations involving the unloading of rolls of poly pipe from vehicles or trailers. These incidents have led to serious injuries and have had the potential for worse outcomes.

In June 2015, an underground operator became trapped beneath rolls of poly pipe that fell from a trailer during unloading. The operator was releasing tie-down straps securing the rolls, when the rolls of poly pipe toppled. He over balanced, fell from the truck tray to the ground, and was struck by the falling poly pipe receiving serious crush injuries.



Position of poly pipe after the incident. The forklift and hydraulic jacks were used to move the poly pipe to access the underground operator trapped beneath.

In late-2014, there was a near-identical incident at another mine site. A freight truck driver entered five poly pipe rolls stacked on a trailer to release the two binding straps. When the rolls separated, the driver was dragged off the trailer by a roll of poly pipe and fell to the ground, receiving a compound leg fracture.

Summary of hazard

Hazards associated with unloading rolls of poly pipe are not being adequately assessed. These hazards include:

- instability of poly pipe rolls on release of load binders
- falls from height
- workers in the 'line-of-fire'
- stored energy a roll of 110 mm poly-pipe weighs approximately 318 kg, when falling from a height, such as a trailer, the stored energy is significant.

Contributory factors

- Workers required to be on the truck tray and in close proximity to the load in order to release the load binders.
- There was no secondary restraint on the rolls of poly pipe after the release of the load binders.
- The loading and unloading procedure did not consider all of the hazards.
- A risk assessment, such as a job safety analysis (JSA) or similar, was not completed.
- Workers received only limited training in removing unstable loads from a trailer or flatbed truck.
- Site workers are unfamiliar with the task and associated hazards (e.g. in some instances transport company operators normally unload the poly pipe).

Actions required

The following actions are recommended to mining operations to assist in the development and implementation of safe systems of work for the transport, loading and unloading of poly pipe.

Engineering controls

Consider the use of engineered structures (e.g. frames) to contain loads.

Risk assessment

- Review freight unloading procedures and adequacy of risk management controls.
 - Note: As part of the road transport chain, mining operators should review their responsibilities under the Road Traffic (Administration) Act 2008 and the Road Traffic (Vehicles) Act 2012.
- Conduct specific risk assessments (e.g. JSA) when job parameters change and where workers may not be familiar with the loading and unloading process.

Supervision

 Provide adequate supervision reflecting the knowledge, experience and training of workers as well as the nature of the task and associated hazards.

Training

- Confirm workers are aware of the hazards associated with the loading and unloading of freight.
- Train workers in the safe use of equipment for the loading and unloading of freight.

Further information

- Department of Mines and Petroleum, www.dmp.wa.gov.au/ResourcesSafety
 Significant Incident Report No. 211 Freight truck driver injured in fall from trailer
 Toolbox presentation Why is falling from height a problem?
- Main Roads, Chain of Responsibility www.mainroads.wa.gov.au/UsingRoads/HeavyVehicles/Compliance/Pages/CoR.aspx

Note: This Mines Safety Bulletin was originally issued on 24 August 2016. It has been reissued to include reference to the 'Chain of Responsibility' provisions.

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