



Significant Incident Report No. 215

Subject: Overloaded stemming truck rolls over

Date: 11 May 2015

Summary of incident

A loaded stemming truck was being driven at low speed through a right hand turn to enter a drill pattern. As the stemming truck turned, it rolled onto its left hand side, resulting in the load of stemming spilling out and also injuring the passenger. The emergency response team was mobilised to provide medical assistance and secure the scene.

The investigation determined that there had been after-market modifications to the truck. Instead of a competent person re-calculating the truck's gross vehicle mass (GVM), the new GVM was estimated by the supplier, who was not the truck's original equipment manufacturer (OEM), based on a similar stemming truck used at another site.

At the time of the rollover, the loaded truck's mass was actually 4.5 tonnes overloaded despite being 2.1 tonnes less than the estimated GVM.

Note: GVM is the maximum permissible operating mass of a vehicle, and includes the chassis, body, fuel, accessories, driver, passengers and load.



Front and rear views of rolled stemming truck

Direct causes

- The GVM estimated by the supplier was 6.66 tonnes greater than the design GVM calculated by engineering consultants after the incident.
- The stemming truck had been overloaded as the GVM provided was incorrect.

Contributory causes

- Full operating manuals, drawings and engineering sign-off were not provided by the supplier of the modified stemming truck.
- The truck, which was hired, was not subjected to the same approvals process as purchased vehicles.

Actions required

Mine operators

- Ensure equipment, whether hired or purchased, is supplied with the correct safe working loads.
- Ensure competent persons approve any modifications.

Suppliers, importers, manufacturers, modifiers and designers

Suppliers, importers, manufacturers, modifiers and designers have obligations under section 14 of the *Mines Safety and Inspection Act (1994)* and Part 6 of the Mines Safety and Inspection Regulations (1995), including:

- ensuring the design and construction of plant for use at a mine does not expose persons to hazards
- providing safety information as specified by the relevant Australian Standards.

Further information

Visit www.dmp.wa.gov.au/ResourcesSafety for information on occupational safety and health in the resources sector.

This Significant Incident Report was approved for release by the State Mining Engineer on 11 May 2015