



Safe Operation of Tip Trucks – Hazards During Tipping



INCIDENT

In July 2007 a tip truck operator died whilst unloading a load of pelletized animal feed in South Auckland. The operator's body was found by fellow employees under a pile of grain feed at the rear of his truck.

CIRCUMSTANCES

The Department of Labour investigation identified a number of factors which are believed to have contributed to this accident:

- The truck's tailgate locking hooks had a history of failing to release when activated from the cab.
- The company had previously carried out its own repairs to try and rectify this malfunction.
- On earlier occasions, the truck operator had been seen using a metal bar to manually force the tailgate hooks open. This had been done with the bin in the horizontal position.
- The rear of the bin was fitted with chains and pins that could be adjusted to limit the tailgate opening distance.
- On the day of this accident the truck tray was found with the bin elevated, the tailgate open, and the majority of the 10 tonne load discharged.
- The secondary tailgate chains were not pinned.

The Department of Labour investigated an earlier fatal accident in 2002 in which a tip truck operator died whilst unloading a load of silage. Investigators concluded that the operator had been using a jack handle to prise open a jammed tailgate locking hook. It is believed that the operator was struck by the full force of the tailgate and the load of silage. In that instance, the tray was also found in the raised position.

In June 2007 the Department of Labour investigated another fatal accident involving the operator of a tip-truck. In that case the operator died when he was crushed between the tailgate, elevated bin, and the partially discharged load of cut firewood.

NO STANDARDS FOR TAILGATE LATCHES

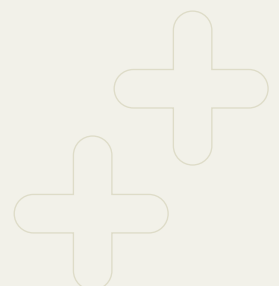
There are no known industry standards that specifically prescribe the design, manufacture, or operation of tip truck tailgate latches. A variety of latch and hook types are used by manufacturers of heavy trucks and trailers.

Certificate of Fitness (COF) inspections of tip trucks and trailers do not currently include checking tailgate latches to ensure their correct operation.



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Tailgate section of tip truck with three locking pins securing the swinging tailgate to the tipping body.





DEPARTMENT OF LABOUR ADVICE

The circumstances of these three accidents are strikingly similar. In each case the operators were in a position of danger at the rear of the tipping trucks during tipping operations.

The rapidly releasing tailgates, and discharging contents, have resulted in fatal injuries.

A number of design features, maintenance steps, and operator training procedures may help to enhance the safety of tip truck operators. These measures include:

- Regular inspection and repair (if necessary) of tailgate locking mechanisms.
- Vehicle repairs carried out by duly qualified persons.
- Driver awareness training, focussing on the dangers of working behind a raised tipping body.
- Raising awareness of the dangers of material getting hung-up during tipping. Loads may release suddenly and without warning.
- The installation of a secondary latching system located to the side of the trailer.
- Ensuring that the tailgate is unlocked before raising the tipping body.

Note: This material has been prepared using the best information available to the Department of Labour at the time of publication. Information may change over time and it may be necessary for you to obtain an update. This material is also only intended to provide general advice and does not constitute legal advice. You should make your own judgement about action you may need to take to ensure you have complied with your workplace health and safety obligations under the law.

WHICH INDUSTRIES/SECTORS OR MATTERS WILL THIS INFORMATION BE RELEVANT TO?

Transport, agriculture, manufacturing, recycling industry.

