

Articulated truck rollovers (update)

Mines safety bulletin no. 170



This supersedes Safety Bulletin 170 of the same name issued on April 3 2018.

On average, an articulated dump truck / water truck rollover occurs every 2 months and of the 64 incidents reported since 2006:

- 37% occurred whilst vehicles were reversing—riding up over uneven ground or stockpiles.
- 35% occurred whilst vehicles were turning—speed, downhill, reverse cambers and wet surfaces.
- 22% occurred whilst vehicles were travelling—operator loss of control.
- 6% occurred on sloping ground.

While the truck cabin remained upright in 92% of the rollover incidents, machine operators have sustained injuries (some serious) in 6% of these incidents.

The continuation of these rollover events at quarries and mines is evidence that the risk controls for operating articulated trucks are both inadequate and ineffective at an industry level.

Recommendations:

Site senior executives must ensure risk assessments are developed specific to **the operation of articulated vehicles**. Effective controls that are identified during the risk assessment process must be implemented and maintained. Such risk assessments should consider the OEM recommendations and include the following factors as a minimum:

- Requirements for training and competency of operators, and supervisors
- Mandatory wearing of seat belts
- Roadway and circuit design criteria, such as curves, cambers, road surface, watering procedures
- Operational limitations eg speed/gear restrictions, maximum grades/slopes etc
- Distribution of load evenly in the body to avoid raising the centre of gravity
- Dump area design and dump procedures.