Articulated truck rollovers

Mines safety bulletin no. 170

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.

Fortunately, these vehicles are designed so that the cabin has remained upright in most (92%) rollover incidents. Despite this, workers 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 are expected to develop (or review) risk assessments specific to **the operation of articulated vehicles** where they are utilised, and implement and maintain effective controls identified and agreed to during the risk assessment process. Such risk assessments should consider 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 restrictions, maximum grades/ slopes etc
- Dump area design and dump procedures.

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