

SAFETY ALERT



ARTICULATED DUMP TRUCK ROLL OVERS

INCIDENT

In recent months there have been a number of incidents where articulated all terrain dump trucks have rolled over. All were near misses without significant injuries to operators.

CIRCUMSTANCES

In most incidents the circumstances were similar with the operator reversing the truck either up a windrow or a previously dumped load. This resulted in the rear of the truck (the tub) over balancing, rolling over and leaving the prime mover upright. In one incident the operator was driving down a properly constructed road which had just been watered down. He lost control and failed to negotiate a roundabout, rolling the prime mover and the tub.

INVESTIGATION

Investigation has identified that the incidents are related to the articulated all terrain dump truck style of vehicle and not specific to one brand of vehicle.

In most cases the driver reversed the truck to either dump a load or allow other vehicles to pass. The rear wheels on one side climbed up the windrow or the previously dumped load. In some circumstances a change in height of 60 to 70cm in one rear wheel set was sufficient for the tub to over balance and roll over (see photograph).

In the case where the driver failed to negotiate the roundabout, speed, driver inexperience and a wet road were major factors contributing to the incident.



RECOMMENDATION(S)

1. Carry out a site specific risk assessment to determine suitability of this style of vehicle for your mine site. The risk assessment should include but not be limited to the following:
 - Operating grades and slopes are within Original Equipment Manufacturers (OEM's) specifications
 - Operating speeds are within OEM's specifications
 - Adequacy of your road design.
 - Vehicles are not operated in an overloaded state.
 - Vehicles have not been altered from the OEM's specifications.

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- Vehicles are fit for purpose.
2. Review driver assessment and training for both experienced and inexperienced operators. Include situations which could lead to potential rollovers and identify appropriate corrective actions.
 3. Raise driver awareness of potential roll over situations, through toolbox talks and/or driver retraining programs.
 4. Review loading and tipping procedures to include centralisation of loads and safe tipping zones.
 5. As part of your accident/incident investigation and reporting process formally notify the OEM or his representative in writing of any roll over incident and the circumstances leading to the roll over.

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