



ACCIDENT/INCIDENT ALERT

No. 3, August 2005

Quarry Dump Truck Rollover

INCIDENT

A 46-year-old truck driver died of severe head and chest injuries when his articulated dump truck rolled on the quarry haul road.

CIRCUMSTANCES

The 6-wheel-drive articulated truck with a 25-ton capacity was one of three carting rock on the 2.5-km haul-road between a quarry and the primary crushing plant. Weather conditions were good and at about 2.50 pm, while the truck was travelling fully loaded at an estimated 20 to 28 km/h, it suddenly veered sharply to the right and struck a pine tree. The loaded trailer jack-knifed and became airborne during the rollover. The momentum created a dynamic load beyond the ROPS design limits, resulting in the cab collapsing on impact with the road.

INVESTIGATION

The driver had been properly trained and he had several years' truck driving experience. He was familiar with the route, which had a 1-in-7 gradient down towards the crusher. The haul-road was well constructed, properly maintained and the surface was dry at the time. There was no evidence of any mechanical fault with the vehicle and no reason was found for the sudden swerve to



Scene following the accident

the right. It is probable that the driver's attention was interrupted, resulting in the collision with the tree and the subsequent rollover.

RECOMMENDATIONS

The Coroner suggested that an alert be issued pointing out possible inadequacies of cab protection on this type of truck. In this case the cab complied with the appropriate ROPS standard (ISO 3471) but it failed under the excessive force developed in the rollover.

Although a seat belt would probably not have changed the outcome of this accident it is important that operators of heavy vehicles fitted with ROPS understand the need to wear seatbelts.