



Mobile mixing unit explosives truck rollover

Mines safety alert no. 318 | 01 June 2016 | Version 2

What happened?

While attempting a u-turn at a road separation bund, a fully loaded twin steer mobile mixing unit (MMU) explosives transport truck rolled onto its side spilling diesel, ammonium nitrate emulsion and ammonium nitrate prill on to the coal mine pit access ramp (see image below). A 2 kilometre exclusion zone was established around the incident site, which took in the mine industrial area and administration buildings, forcing the evacuation of the coal mine.

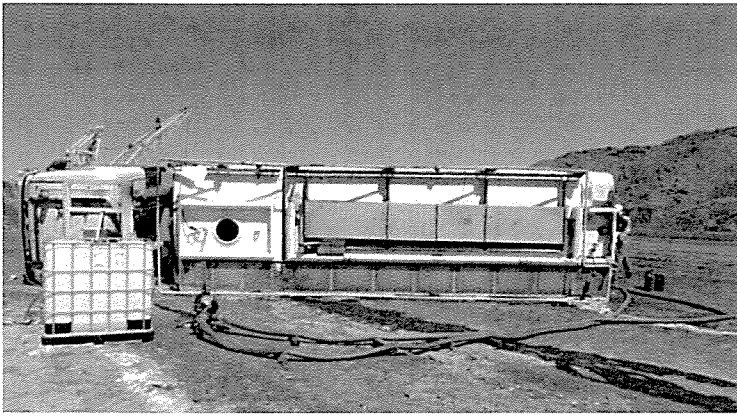
Comments

- The possibility of a fire initiating the explosives was a potential hazard.
- The design of the turning area was not recognised as a hazard and road design was not appropriate for this vehicle type with its high centre of gravity.
- Product hatches were not closed and secured.
- This is the fourth incident of this type since 2009 (see Explosives Inspectorate Safety Alert No. 32, 3 July 2009) and the third since July 2013.

Recommendations

Mines should ensure:

- all vehicle types are assessed for rollover risk
- road design parameters cater for all vehicle types using the roads and these parameters are monitored for compliance
- entire travel routes for vehicles, including explosive vehicles, are assessed for suitability
- operator training includes practical understanding of vehicle operating requirements to prevent or reduce the likelihood of vehicle rollovers
- all blasting agent compartments are closed and secured during transport and will remain so in a rollover
- when conducting a risk assessment or inspection/audit of MPU's on site reference should be made to the AEISG MPU code of practice.
- emergency response protocols cover all reasonably foreseeable events and appropriate Trigger Action Response Plans are developed.



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Issued by the Queensland Department of Natural Resources and Mines

Placement: Place this announcement on noticeboards and ensure all relevant people in your organisation receive a copy.

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