

# TRANSPORT - Fatal 6 - Concrete mixer loss of drum

## WHAT HAPPENED

In June 2023 a third party owned concrete truck mixer was making a delivery, the vehicle suffered a significant structural failure of the mixer chassis/A frame. The failure resulted in the mixer drum becoming detached from the vehicle and coming to rest at the side of the carriageway.



There was no one harmed during the incident and no other road users were in the vicinity of the truck at the time, which was brought to a halt safely. All spilled fluids and concrete from the drum were contained in the immediate vicinity and cleared up shortly after the event by specialist contractors.



The mixer truck and drum were recovered by specialist recovery services, for forensic investigation by specialist technical experts.

### Key Findings:

- 360 CCTV footage from the mixer truck demonstrated that the vehicle was been driven appropriately and the operating standard by the driver was not a factor in the incident.
- The driver is a fully qualified HGV operator and has completed all required inductions, training, qualifications, which were held on his valid OneCard.
- The driver had completed his pre-start check and noted no issues.
- Statutory inspections were up to date and no issues had been identified to the mixer body.
- A forensic examination of the truck was completed by independent specialist technicians who concluded that:
  - The concrete mixer sub-frame snapped suddenly.
  - The failure initially occurred at a weakness in the sub-chassis which had been previously welded for a repair in 2019.
  - The weld had been carried out by a previous owner and not highlighted to the current haulier.
  - The weld had weakened over time and eventually failed resulting in the incident.

# LEARNING POINTS / ACTIONS TAKEN

- Immediately after the incident all the truck fleet dedicated to a major project were inspected, initially by their drivers/haulier and then by vehicle mechanics to confirm similar defects were not present.
- The remainder of the RMX fleet has been visually inspected by the company's transport team checking mixer bodies and their chassis for visual signs of cracking or deterioration.
- Operators should ensure that daily driver pre-start check sheets specifically include key structural areas like the A frame chassis.
- McFee have agreed to digitise their operator's manual and will issue QR codes, to be fixed to mixers they have manufactured, which will enable anyone to access the latest operator's manual.
- Concrete suppliers should ensure all their hauliers have the latest manuals for all their mixer trucks and the checks are being carried out correctly.
- All hauliers must inform their service providers to carry out a thorough inspection of mixer drums, bodies, and chassis by a competent mechanic on their vehicles at the next 6 weekly safety inspection.
- Any repair work carried out to mixer bodies, or indeed elsewhere on the truck, should be listed & passed on to future owners so as correct focus can be given to potential future weak spots.
- The lessons learned and actions from this incident and investigation will be shared with the MPA Safety working group.

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<b>LOCATION:</b>	<b>ON-HIGHWAY</b>	<b>ALERT STATUS:</b>	<b>Normal</b>
<b>ACTIVITY:</b>	<b>TRANSPORT &amp; LOGISTICS / DELIVERY</b>	<b>DATE ISSUED:</b>	<b>11/07/2023 21:18:48</b>
<b>SUB ACTIVITY:</b>	<b>DELIVERING READYMIX</b>	<b>INCIDENT No:</b>	<b>03650</b>