Bulk Tipper Trailer Ram Failure

WHAT HAPPENED

Whilst a load was being discharged from a bulk tipper onto a storage pad, the top ram mounting bolts failed. This resulted in the unsupported trailer body falling approximately 15 metres onto the chassis and the tipping ram striking the top of tractor unit cab.

Fortunately, no one was injured: Although substantial damage was caused to the chassis and tractor unit.

Underlying Causation:

- Tipper ram was fully extended

- Load was not free-flowing

- Driver moved trailer < 2metres to discharge load

- Tipper ram was not connected to trailer

- 4 mechanical fasteners had failed (2 had sheared off and there was evidence of metal fatigue, 2 had stripped off nyloc nuts from threads)

- Trailer was first registered 07.11.13



Final Ram Position



Trailer Tipper Ram Mountings

LEARNING POINTS / ACTIONS TAKEN

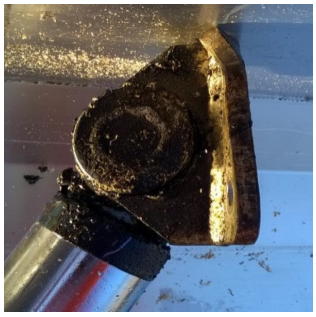
Learning Points

- Two of the mechanical fasteners showed evidence of metal fatigue

- The inspection and maintenance regime had been ineffective

- Fixings are not part of the mandatory Vehicle Operator Services Agency (VOSA) inspection regime

Ensure that any inspection and maintenance regime, takes into account other critical components that are not part of a mandatory VOSA inspection regime; in this case, the ram top mounting fasteners.



Trailer Tipper Ram Mountings



Top of Tipper Ram Mounting Plate

LOCATION:	**LIME & SLAG PLANTS**	**ALERT STATUS:**	**Normal**
ACTIVITY:	**TRANSPORT & LOGISTICS / DELIVERY**	**DATE ISSUED:**	**12/10/2017 12:21:43**
SUB ACTIVITY:	**LOADING**	**INCIDENT No:**	**01473**