

Fatal 5 - Truckmixer water hose incident.

WHAT HAPPENED

While a truckmixer was being loaded at a concrete plant, a hose was attached to the water tank for refilling. The fill hose was connected on the passenger side of the truck. After loading, the truck began to pull forwards from the loading bay, but the driver forgot to disconnect the hose from the tank. A Cemex visitor to the site noticed the situation and signalled to the driver to stop, by this time the hose was under significant tension. This incident could have had serious repercussions if the hose had snapped or part of the plant structure had broken away, especially since there was another driver nearby at the time. This is not the first incident of this nature.

Key Findings

Safe systems - Most previous incidents have occurred when the truck fill hose is attached on the passenger side of the truck. When positioned on the driver side the hose is visible to the driver as they make their way to the cab.

Tools and equipment - When this type of incident occurs, energy stored in the hose is in proportion to the length of the hose, since it stretches under tension.

Look after yourself and each other - If a driver fails to notice that they have not detached the truck fill hose and drives off, the hose stretches under force until it either snaps or breaks away part of the metal pipework or plant structure, which could result in anyone in the area being struck and seriously injured

LEARNING POINTS / ACTIONS TAKEN

HOW COULD THIS HAVE BEEN AVOIDED

- Locate the pipework and hose on the drivers' side. Image below shows example of the preferred type of set-up.



- Position the pipework such that the hose is as short as possible, ideally no longer than 5 metres.
- Fit magnetic couplings between the metal pipework and hose to act as a weak point and prevent a breakaway under force; the "T" piece to the pipework should be fitted in line with the direction of the hose coupling. See an example of a coupling below



Recommended magnetic coupling details:

- Re-usable magnetic coupling.
- Make / model: Husky #003385 Reconnectable Safe-T-Break
- Shock absorbing spring to stop nuisance breaks.
- Separates at under 200lbs to minimise backlash



Image above shows a magnetic coupling in place and a typical example of a connection without one.

LOCATION: READYMIX OR MORTAR PLANT
ACTIVITY: TRANSPORT & LOGISTICS / DELIVERY
SUB ACTIVITY: DRIVER AWARENESS

ALERT STATUS: Normal
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