

Second Concrete Pumping Accident in Recent Times

Background

Another construction worker has been injured in a concrete pumping accident. He was holding the discharge hose 'fireman' style waiting for the concrete to come through for placement in the floor slab. A blockage had occurred, but before anyone realised, the pressure built up enough to release the blockage. The rush of concrete blew out over other workers in the vicinity, and the hose kicked back striking the hoseman in the face. He suffered a fractured jaw and lost some teeth as well as other injuries.

Investigation Findings

The blockage occurred when the hopper on the pump was briefly allowed to run dry. The pump operator did not realise that because he was operating the boom via a remote control unit. Air was sucked into the hose, then followed up with more concrete creating an air block. When it released itself, the hose kicked back violently.

Recommendations

Following the accident the owners of the concrete pump made a number of changes to ensure an accident of this type would not happen again, and any company that places concrete mechanically should adopt these.

1. They cut the steel end off the hose, so that the last discharge section was only rubber.
2. They ensured that wherever possible concrete was only placed vertically, not horizontally.
3. Warning signs and horn buttons were installed for the concrete drivers so that if



the hopper ran low the emergency horn could be sounded.

4. Where the hose was required to be laid along the ground, two placers move the hose around. The first uses a choker-chain and handle so that heavy lifting is not required. The second uses a metal hook to drag the hose into a smooth curve for better concrete discharge.
5. The pump operator ensures that before pumping commences the placers are instructed on these procedures. Likewise, the concrete truck drivers are made aware of the 'low hopper level' warning horn.

For further information, contact your local OSH office. Look under Occupational Safety and Health or Department of Labour in the blue pages of the telephone directory for contact details. Copies may be downloaded from the website: www.osh.dol.govt.nz.