



Background

Several recent concrete pumping incidents have highlighted the risks involved with the use of concrete pumps (line or boom) used to deliver pre-mixed concrete.

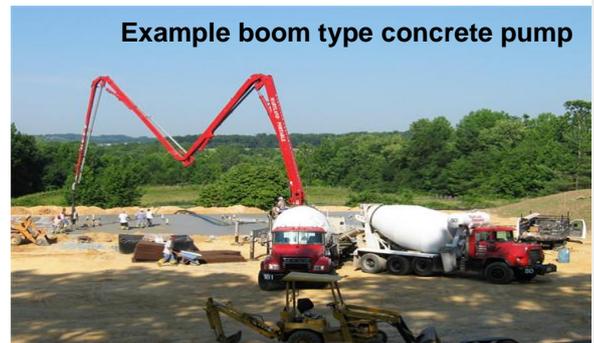
The majority of incidents involved injuries or near misses from concrete line blockages, which created the build-up of pressure within the system, resulting in equipment failure or the uncontrolled movement of delivery hoses and pipes.

SafeWork NSW have also recently successfully prosecuted a company and officer following the death of a worker holding a concrete hose on a construction site. Compressed air was being used to clear a blockage from the hose. The hose whipped about under pressure and a metal coupling on the end of the hose struck the worker in the head causing fatal injuries.

Control Measures

The following controls are recommended to support safe systems of work:

- Prior to work commencing, conduct a risk assessment specific to the site and activity. If blockages arise, reset and determine appropriate controls with workers and skilled personnel.
- A competent worker is present at the pump to operate the emergency shutdown system.
- Effective communication is agreed and enacted between the pump operator and the line hand.
- Safe work procedures are adopted for clearing blockages in line with product specifications.
- During cleaning, remove all reducers and the rubber hose from the delivery line.
- When attempting to clear blockages, isolate the activity and exclude all workers from the area except for experienced and competent pumping personnel involved in clearing the line. Control measures must be in place to protect these workers.
- Investigate all blockages to determine the cause to prevent reoccurrence.
- Follow the concrete pump manufacturer's instructions for:
 - a) Operating the pump
 - b) Cleaning the line
 - c) Inspecting and maintaining the pump and line equipment
- Appropriate PPE is supplied and worn at all times.



For Distribution

- Transport for NSW

Further information:

- [Concrete Pumping COP - WHS QLD](#)
- [Concrete Pumping Delivery - Industry Guidelines - CCAA](#)
- [SafeWork NSW v NonAbel Concrete Pump Pty Ltd; SafeWork NSW v Bilal Hamdan](#) [2020] NSWDC 65