



Safetymatters



SM-082 March 7, 2024

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Concrete Pump Safety Update

CORONER'S INQUEST INTO A RESIDENTIAL PUMPING FATALITY

January 16, 2017 Statements of Fact

On the day of the incident, workers were installing concrete on the exterior excavated walls of the project using a REED concrete pump. The construction crew applied concrete to the west and north walls of the excavation, and work finished at around 4:00 pm. At this time, various workers started to clean up and finish the concrete on the walls within the excavation.



A worker returned to cleaning out the hopper of the concrete pump using a chipping hammer with the hopper grate in the open position when he became entangled within the still-spinning agitator.

Final Recommendations from the April 17 – 20, 2023 Inquest

The inquest into this fatality made the following recommendations:

RECOMMENDATION No. 1

Work with industry partners to review current education efforts for construction companies and their employees regarding legal rules and requirements as they relate to:

The operation of equipment in accordance with manufacturer's manuals and all other requirements in Sections 93-95 of Ontario Regulation 213/91 made under the Occupational Health and Safety Act, 1990 (the Act);

The duty of employers and supervisors to ensure that workers work in accordance with the Act and its regulations and other requirements on employers under section 25 of the Act and supervisors under Section 27 of the Act; and

The use of fencing when equipment must be located on a public roadway as required under Section 65 of Ontario Regulation 213/91 made under the Act.

The coroner noted that the concrete pump had been altered in two ways. The first was to bypass the safety switch, which was to detect when the safety grate was raised on the hopper, and the second was to add an electrical splice in the control box to allow the concrete pump to operate when the grate was open.

RECOMMENDATION No. 2

Increase random inspections of job sites with a particular focus on equipment safety.

RECOMMENDATION No. 3

Undertake an inspection of the Employer regarding their compliance with Sections 25 and 27 of the Act and Sections 93-95 Ontario Regulation 213/91 under the Act.

RECOMMENDATION No. 4

Appoint an advisory committee under s. 21 of the Act to inquire into the feasibility of amending the Construction Regulations (Section 94 (1) and 94 (2) of Ontario Regulation 213/91) to require third-party inspection of mechanically-powered vehicles, machines, tools and equipment rated at greater than ten horsepower on an annual basis.

Concrete Ontario Safety Committee Feedback

After reviewing the Coroners Inquest report, the Association's Health & Safety (H&S) Committee offers the following comments:

- This report highlights a very serious safety incident that has the potential to impact our own members, and as such, a standalone safety bulletin will be issued to our industry.
- In addition to the four recommendations in the report, the Ministry of Labour has identified the specific actions they have taken to address the safety concerns identified, and these actions can be found in the attached final report.
- The Concrete Ontario H&S Committee was very disappointed **that there was no reference in this report to the CSA Z151 Concrete Pumps & Placing Booms National Standard**. This standard was updated in 2017, and reaffirmed in 2022, and specifically addresses the responsibilities of pump manufacturers, pump owners, and pump operators. It also includes requirements for equipment inspections. This national concrete pump safety standard is not currently referenced in the Occupational Health and Safety Act, even though Concrete Ontario contacted the Ontario Government when the standard was updated in 2017 requesting the addition. (<https://www.csagroup.org/store/product/Z151-17/>)
- Concrete Ontario will once again reach out to the Ontario Ministry of Labour to request that CSA Z151 be added to the OHS requirements.

All Concrete Ontario members are encouraged to regularly include the issue of concrete pump safety in company safety talks. Incorporating the information from this inquest, as the basis of further safety discussions, should also be considered for any personnel that are working on the jobsite near concrete pumping operations.