Regulatory amendment:

A primer on concrete pumping inspections

In March 2020, WorkSafeBC's Board of Directors approved changes to the Occupational Health and Safety (OHS) Regulation that will take effect July 14, 2020.

Part 20, which regulates construction, excavation and demolition, has been amended to increase worker safety when operating or working around concrete pumping equipment.

The purpose of this primer is to provide an overview of the amendments to concrete pumping equipment inspection requirements. Please review Part 20.47 of the OHS Regulation and Guidelines to ensure you are familiar with all of the amendments.

Background

Concrete pumps and placing booms are complex pieces of equipment commonly used in construction. Concrete placing activity requires workers to be in the area of the pump and at the discharge end of a placing boom. Any component failure could pose a high risk of serious injury to workers who are operating or in the vicinity of the equipment.

Objective of the regulatory amendment

The purpose of the amendment is to clarify the responsibilities of employers and professional engineers to ensure that annual inspections of concrete pumps and placing booms are done in a safe and consistent manner.

Section 20.26.3 of the OHS Regulation provides that the inspection of concrete pumps and placing booms must be done in accordance with CSA Standard Z151-09 Concrete Pumps and Placing Booms (the CSA standard). The CSA standard requires frequent and periodic inspections of concrete pumps and placing booms. The CSA standard states that a qualified person must conduct a periodic inspection (at least annually) of the material placing boom and structural support system, and a weld inspector must conduct the periodic visual inspection of welds. Section 20.47(2) of the OHS Regulation currently overrides this aspect of the CSA standard by requiring a professional engineer to personally conduct these inspections. As this requirement is generally inconsistent with engineering practices, section 20.47(2) is being repealed. Three new subsections are being implemented to provide further clarity:

- Subsection (2) states that concrete pumps and placing booms must be inspected at least annually in accordance with good engineering practice to ensure the equipment meets manufacturer specifications, the CSA standard, and OHS Regulation.
- Subsection (3) clarifies that this inspection must include the structural, mechanical, and control system components. A list of the structural, mechanical, and control system elements to be inspected is provided in the CSA standard.
- Subsection (4) requires that on or after January 1, 2021, a professional engineer must certify that the concrete pump and placing boom are safe for use. This means the equipment should reasonably be expected to perform safely until the next inspection is required, if operated according to the manufacturer's instructions.

Please note that the effective date for the revisions begin on or after July 14, 2020. The requirements in subsection (4) are in effect on or after January 1, 2021.

For more information

Visit worksafebc.com for more details on the amendments to Part 20 of the OHS Regulation.

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