



Gord Woodward

Gord has run his own communications and business-consulting firm for 24 years. He brings us “Ask an officer” (right) and a “Safety talk” on phase integration in forestry (page 15).



Jesse Marchand

Jesse is the managing editor of *WorkSafe Magazine* and has been working in publishing and journalism for 18 years. In her cover story she speaks with an employer who is building a safety program in the new cannabis industry (page 7).



Marnie Douglas

Marnie is a Kelowna-based writer and communications professional who began her career in journalism. Her “Work science” story looks into interventions to help shift workers beat fatigue (page 12).



Gail Johnson

Gail has been working as a journalist since 1996 and has earned national, provincial, and local awards and nominations for her work. She brings us a “WorkSafeBC update” on commercial driving (page 22).

Training for concrete pump operators



Ashley Teister
Occupational safety officer

Region: Port Moody
Years on the job: 5

This month, occupational safety officer Ashley Teister talks about concrete pumping safety and the new concrete pump operator certification, which is the first of its kind in North America.

Q. What are the risks associated with pumping concrete and how do I reduce them for my crews?

- A.** Construction sites often experience congestion so there’s a risk of contact with other equipment working simultaneously. You need to have a plan in place and ensure effective communication between all of the operators.

There’s also the risk of contact with an overhead energized power line. Plan the set-up of the pump to eliminate the hazard. If you cannot eliminate the hazard, always maintain a safe distance. Part 19 of the Regulation specifies the minimum limits of approach.

Improper set-up can increase the potential for the concrete pump truck to fail or tip over, or for the supporting surface to fail, which can lead to the pump tipping over. The ideal space will be level, large enough for the pump with fully extended outriggers, and away from power lines and excavations.

If you’re pumping concrete into wall forms and your crew works at heights, they could fall. You need to provide an appropriate work platform, usually with guardrails.

Blockages in the hose are another risk with potential for catastrophic injury. When blockages clear, workers can be struck by the blockage itself or by a whipping hose. Air trapped behind a blockage can create tremendous force, so ensure the concrete is added to the hopper in a consistent manner to prevent air pockets.

There are other risks to consider. Wet concrete on exposed skin can cause cement burns and dermatitis, so wear long-sleeved clothing, gloves, and safety glasses. Wear on the pipe clamps can lead to falling materials, so inspect restraint devices to make sure they’re in good working condition.

Q. What does the new operator certification cover?

- A.** The BC Construction Safety Alliance, in partnership with industry and labour organizations, launched North America's first certification program for concrete pump operators in September 2019. The training is voluntary and helps employers ensure their operators are competent to operate the concrete pump.

The certification involves both a written safety exam and a practical exam to demonstrate competence. Once you're certified, you take a new practical exam every five years to re-certify. You can learn more about it at ccpo.ca.

Q. What should I include in my planning before starting a job?

- A.** The safe placement, operation, and inspection of concrete pump trucks is essential to a safe worksite. Assessing the site before starting work can ensure the operator has the necessary equipment to safely set up, is aware of the site conditions and arrangements to be made for the set-up, and that a competent operator is sent to the site. You will need traffic control or lane closures if your outriggers will go into traffic.

Q. What often gets overlooked when it comes to concrete pumping safety?

- A.** Sometimes short rigging is used when the manufacturer's instructions do not permit it. Full extension and deployment of the outriggers is always the first option. Short rigging may only be used if it is impracticable to fully deploy all outriggers.

Another issue is that set-up does not always include a stability assessment of the supporting soil the pump and outriggers will be placed on. Supporting soil could be adjacent to an excavation or above underground utility banks, for example.

Operators and employers often use the pre-trip inspection as a pre-use inspection, but this doesn't fulfill the health and safety requirements. A pre-use inspection needs to include the site conditions prior to setting up the concrete pump.

When you set up and operate around overhead power lines, be sure the operator is aware of the voltage of the lines. Operators also need to know the work arrangements to prevent contact when setting up, operating, and retracting the boom on the pump. The other element that is also frequently missed is the provision for inadvertent movement. Even if you're outside the limits of approach to the power lines, is there a potential that the pump could contact these lines?

There's also a common misconception that employers only need to have the inspection decal. They actually need to have inspection documentation readily available for review, too.

Q. Where can I get more information?

- A.** You can find resources by searching "concrete pumping" at worksafebc.com and visiting Concrete BC at concretebc.ca.

Looking for answers to your specific health and safety questions? Send them to us at worksafemagazine@worksafebc.com, and we'll consider them for our next "Ask an officer" feature. ☺

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