

GUIDELINES FOR SAFE DRINKING WATER

Construction Safety Association of Ontario

These guidelines are intended to help employers provide safe drinking water on construction sites.

The Construction Regulation on drinking water

Section 28 of Ontario's Construction Regulation (O. Reg. 213/91) states:

- (1) A reasonable supply of potable drinking water shall be kept readily accessible at a project for the use of workers.
- (2) Drinking water shall be supplied from a piping system or from a clean, covered container with a drain faucet.
- (3) Workers shall be given a sanitary means of drinking the drinking water.
- (4) Workers shall not be required to share a common drinking cup to drink water.

Taps and pipes

Ideally, workers would have access to safe drinking water from a tap connected to the public drinking water system.

If there has been stagnant water sitting in water lines (pipes or hoses), flush out the lines before use: let the water run for 10 minutes.

If workers can't get drinking water directly from a tap, you must provide a corrosion-resistant dispenser.

The dispenser

- must have a gravity-flow design to prevent contamination during use. It should also be tamper-proof. No-one should be able to open the cover and dip a cup in or get at ice floating on top.
- must be cleaned and sanitized once every 24 hours. This involves washing with a detergent, rinsing three times with clean water, and sanitizing the container by filling it with a weak chlorine solution (100 parts per million—see below) for 1 minute. Pay special attention to sanitizing the dispenser faucet. After sanitizing, rinse and air-dry the dispenser in a contamination-free area.

How to make a sanitizing solution

To make a chlorine sanitizing solution, mix liquid chlorine bleach and water (24°C) in this ratio:

- 1/2 teaspoon bleach for every litre of water.
- 2 teaspoons bleach for every gallon of water.

Filling the dispenser

- Fill it in an area free from chemical and biological contaminants (e.g., dust, insects).
- If you get the water from washroom trailers, you must comply with the plumbing code to protect the water supply. (There can't be any cross-connections and you need backflow devices.)
- If possible, fill the dispenser from a dedicated tap.
- If you can't fill the dispenser from a dedicated tap, fill it with a hose specifically designed to carry potable water. A regular garden hose, contrary to popular belief, is not good enough. The material that garden hoses are made of can release unhealthy chemicals into the water.
- Use this potable-water hose exclusively for filling the dispenser. If this isn't possible, sanitize the hose and intake nozzles. Using the hose to fill other equipment or tanks—or to clean them—can lead to contamination.
- Do not leave the hose on the ground or in any place where it can become contaminated.
- Ice must be free of human contact. If necessary, have workers wear disposable plastic gloves when handling ice.
- Do not allow anyone who is sick to fill or handle the dispenser.

Setting up the dispenser

- Put the dispenser in an area free from contamination, at least 1 metre (3 feet) above ground.
- Put a sign saying "Drinking Water" on the dispenser.
- Provide single-serving cups.

If you cannot follow these guidelines, provide bottled water.

The Construction Safety Association of Ontario relied on the Maricopa County Environmental Services Department's "Guidelines for the Safe Handling of Drinking Water, Ice and Dispensers" for much of the content of this document.