

Working Safely Over or Around Water

NCHCA Health and Safety Committee

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Standard Construction over and around water presents dangers both to the contractor's staff and the public. Precautions specifically developed for such construction must be taken before work begins. We forget sometimes that this includes standard construction tasks such as culvert replacements, bridges, storm management ponds, large sewers, ditches, etc. It only takes a few centimeters for a person to drown in, especially if the bank's slopes are muddy and slippery. Being wet in cold temperatures can lead to hyperthermia, but so can being soaked in cold water on a warm day.

These types of work around water are a natural attractant for kids and adults alike. Since they regularly go to or around water sites, they are even more curious to see what your building or modifying. That is why we must be more diligent in safe guarding our sites from pedestrians when we work around water. Signage works with most adults, but kids that cannot read need hazard symbols or fencing to discourage them from entering your site.

Here are some procedures or best practices that you may bring to your staff's attention:

Working Over or Around Water Tool Box Talk

Procedure

Warning signs shall be posted on the project to warn public and workers of the hazards around water (danger deep or icy water, keep out).

Where there is current in the water, a line extending across the water, objects attached to it that are capable of supporting the heaviest person on the site in case he/she falls into the water shall be installed.

All workers must be alert and aware of their fellow workers at all times.

Workers in proximity to a water hazard who may drown will be protected by a personal flotation device. This device will provide buoyancy adequate to keep a worker's head above water, face up without effort by the worker.

All workers wearing a flotation device will visually inspect it to ensure it is free from defects prior to use.

Before starting works each day a designated worker will make sure that, the rescue equipment such as boats must be stored on or near the project ready for use.

All workers working at this location will be required to attend a safety orientation and safety meeting on the use of lifejackets, PPE.

At least two workers will be appointed and trained for rescue procedure.

The names posted in the workplace.

Rescue Equipment

A ring buoy attached to 15 meters (50 feet) of 9.5-millimeter diameter (5/8" dia) polypropylene rope.

Lifejackets are available for each person involved in the rescue.

A boat (where applicable) equipped with a motor if the water is likely to be rough or swift.

A boat hook (which is a short shaft with a fitting on one end shaped to help in rescuing a person or recovering an object.)

An ALARM (horn) system must be maintained to alert workers to the need for an emergency rescue.

Life Jacket / Personal Flotation Device (PFD) requirements

PFDs or Personal Flotation Devices must be Canadian Coast Guard, Department of Fisheries and Oceans approved or equivalent. The PFD information must state that it is designed to keep the wearer face up in the water. Actual styles may vary and change. Check with your local jurisdictions and EHS Department for further information.

Rescue Procedure

1. If a person falls into the water--- SOUND ALARM---, two workers trained in rescue, immediately put on life jackets and proceed to rescue the person.
 2. Once the person has been retrieved to shore, ensure there are no injuries and perform first aid if necessary.
 3. If required prepare for medical attention and transportation to the hospital.
 4. Stay with the injured person at all times and keep them calm.
 5. Ensure the person is kept warm until the appropriate medical attention is given.
- To eliminate any hazardous conditions and dangers associated with working around water the following safe work procedures are to be implemented.

Floating Work Platforms

When used on a construction project, rafts, scows, barges and similar vessels are considered work platforms. As such, they are subjected to certain requirements. Guardrails must be provided along open edges. The guard rails may be removed at the working side of the platform, provided workers are protected by alternate measures of fall protection.

Workers on the floating platform must wear lifejackets. A life jacket provides enough buoyancy to keep the wearer's head above water, face up, without effort by the wearer. Appropriate rescue measures must be prepared.

It is recommended that a throw ring and rope be secured to a guardrail for quick access.

Transporting Workers by Boat

When navigating any waterway, boats and other floating vessels must comply with the Legislative requirements. Consult the EHS Department or Ministry of Labour.

Boats that are not longer than 6 meters (20 ft) must be equipped with at least:

One approved lifejacket for each person on board

One paddle or an anchor with at least 15m of cable, rope, or chain

One 1 liter bailer or one manual pump

One class 5bc fire extinguisher if the craft has an inboard engine, fixed fuel tank

One sound signaling device

All powerboats require navigation lights if operated after sunset or before sunrise. All boats also require radio communication that is compatible to the radio used on site and or barge.

Spill Procedure

To prevent a spill or accident release of hazardous material and contamination of the water all heavy equipment and tools must be fueled on land. When in proper position and secured for work a floating platform must be surrounded by floating absorbent socks attached to the vessel in the event of an accidental release/spill. Additional socks and absorbent pads & waste containment disposal bags must be available on site. Contact MOL spill reporting office should one occur.