

# Protection Against Drowning – Know the Laws of Your Province



OHS regulations require employers to protect workers who perform operations near or above a body of water in which they can drown. Failure to safeguard workers from drowning hazards can expose a company to the risk of crippling OHS penalties. Suncor recently learned that lesson the hard way. The Alberta energy sands company was fined \$420,000 for the death of a 25-year worker who drowned when the bulldozer he was operating on top of thin ice crashed into a tailings pond. Another employer, Christina River Construction, was also fined \$325,000 for the incident.

OHS drowning protection requirements vary by jurisdiction. New Brunswick has the most detailed requirements, while Ontario has the most general ones. Note that these rules generally apply to workers at risk of drowning who don't work on a boat or ship. The latter are subject to protections in maritime and other laws. Here's a rundown of the rules you must follow regardless of where in Canada you're located.

## OHS Drowning Protection Requirements

## FEDERAL

If there's a drowning risk, employer must: (a) provide every person granted access to the workplace:

- i. a life jacket that meets Canadian General Standards Board Standard 65.7, Life Jackets, 2007 version, as it existed before withdrawal in November 2016, published on Government of Canada website publications.gc.ca,
- ii. a personal flotation device or buoyancy aid with a level 70 performance within the meaning of UL Standard 12402-5,

Personal flotation devices – Part 5: Buoyancy aids (level 50) – Safety requirements, when tested in accordance with UL Standard 12402-9,

Personal Flotation Devices – Part 9: Test Methods, or

- iii. a safety net or a personal fall-protection system;
- (b) provide emergency equipment and ensure it's in good operating condition and readily available; (c) ensure that a qualified person is available on site to operate the emergency equipment; (d) if appropriate, provide a power boat and ensure it's in good operating condition and readily available; and (e) prepare written emergency procedures that contain: i. a full description of the procedures to be followed and the responsibilities of all persons who are granted access to the work place, and ii. the location of any emergency equipment; and 2. If the workplace is a wharf, dock, pier, quay or similar structure, a ladder that extends at least 2 rungs below water level must be installed on the face of the structure every 60 m along its length (*COHS Regs.*, Sec. 12.15)

## ALBERTA

1. If there's a foreseeable danger of a worker being

exposed to hazard of drowning, employer must ensure that the worker wears a life jacket and worker must wear a life jacket unless other safety measures are in place that will protect a worker from drowning.

2. In any case, workers that work from a boat for an extended period of time, may wear a personal flotation device if employer ensures that there's also a life jacket readily accessible to each worker on the boat.
  3. Employer must ensure that a life jacket or personal flotation device is approved by Transport Canada, or an agency approved by Transport Canada (*OHS Code*, Secs. 240-241); and 4. Employer must ensure that a worker uses an appropriate fall protection system in combination with a life jacket or personal flotation device if the worker: (a) may fall into water that exposes worker to risk of drowning, or (b) could drown from falling into the water, from other than a boat (*OHS Code*, Sec. 157);
- Definitions: i. "life jacket": PPE capable of supporting a person with the head above water in a face up position without the direct effort of the person wearing the equipment; and ii. "personal flotation device" PPE capable of supporting a person with the head above water, without the direct effort of the person wearing the equipment.

## **BRITISH COLUMBIA**

1. Worker at risk of drowning must wear a personal flotation device (PFD) or lifejacket with sufficient buoyancy to keep the head above water unless other acceptable safety measures are in place that will protect workers from drowning, or the water is too shallow to allow the lifejacket or PFD to function effectively;
2. PFD need not be worn when a personal fall protection system, guardrail or safety net is used in accordance

with Part 11 (Fall Protection) to prevent a fall into the water;

3. Buoyancy equipment must be labelled and meet the requirements of: (a) CGSB Standard CAN/CGSB-65.7-M88, Lifejackets, Inherently Buoyant Type with a minimum buoyancy of 93 N (21 lbs), (b) CGSB Standard CAN/CGSB-65.11-M88, Personal Flotation Devices with a minimum buoyancy of 69 N (15.5 lbs), (c) CGSB Standard 65-GP-14M, Lifejackets, Inherently Buoyant, Standard Type with a minimum buoyancy of 125 N (28 lbs), or (d) British Safety Standard BS EN 396-1994, Lifejackets and Personal Buoyancy Aids – Lifejacket 150 N, automatically inflatable units with a minimum buoyancy of 150 N (34 lbs);
4. Workers working alone at risk of drowning, the worker must wear a lifejacket meeting the requirements of the above Section 3 (a), (c) or (d)—but not (b);
5. If workers use inflatable PFDs or automatically inflatable lifejackets, employer must keep a record of all inspections made and maintenance performed on them; and
6. PFDs and lifejackets must have at least 200 sq cm (32 sq in) of white or silver retroreflective material fitted on surfaces that are normally above the water surface (*OHS Regs.*, Secs. 8.26 to 8.30). Definitions: “lifejacket”: a device that, when worn correctly, provides a specified buoyancy that will turn the wearer face-up on entering the water, and keep the wearer in this position; and “personal flotation device”: a device that, when worn correctly, provides a specified buoyancy to support a conscious person in an upright or backward leaning position, but is not designed to turn a person from a face-down to a face-up position in the water

1. When a worker is required to work at a place from which worker may drown, employer must (a) ensure that worker is provided with an appropriate life jacket or personal flotation device suitable to the workplace situation; (b) ensure that the worker wears the jacket or device at all times while working, except where (i) there are other sufficient measures in place to protect a worker from risk of drowning, or (ii) the personal flotation device or life jacket would be ineffective or unreasonable; (c) ensure that, when a worker is permitted to not wear a life jacket or personal flotation device under clause (b), the jacket or device is kept within immediate reach of the worker; (d) ensure the worker is provided with and wears appropriate PPE suitable to the workplace situation which protects the worker from hypothermia if rescue or removal from cold or icy water may not be achieved immediately; (e) ensure that the following rescue equipment is readily available: (i) a buoyant apparatus attached to a nylon rope, where the rope is no less than 9 mm in diameter and no less than 15 m in length, (ii) a notification or signaling device, (iii) an appropriately powered boat equipped with a boathook, in the case of work performed in, on or above a navigable body of water; and (f) ensure that a sufficient number of properly equipped and trained rescue personnel are readily available to undertake a rescue in the event one is required;
2. Clauses (1)(e) and (f) don't apply where workers are working on a boat; and
3. 6.17(4) Clause (1)(d) applies if a worker is required or permitted to work on ice (*WSH Regs.*, Sec. 6.17);  
Definition: "personal flotation device": a device approved by Transport Canada, or agency permitted by Transport Canada to approve such devices, intended to be worn by a person and that (a) provides a specified buoyancy; and (b) in water, supports a conscious person in an upright or backward leaning position, without any

direct effort of the person

## **NEW BRUNSWICK**

1. If employee is exposed to a risk of drowning, owner of a place of employment, employer and contractor must each ensure employee uses one of the following: (a) a fall-protection system; (b) a life jacket approved by Transport Canada or agency permitted by Transport Canada to approve it; (c) a personal flotation device approved by Transport Canada or agency permitted by Transport Canada to approve it; (d) an automatically inflatable personal flotation device approved by Transport Canada or agency permitted by Transport Canada to approve it; or (e) a personal safety net that meets the requirements of section 49.8 of the regulations;
2. Shell of a required life jacket or flotation device must be bright yellow, orange or red and have retro-reflective material fitted on surfaces normally above the surface of the water.
3. In all cases, employees must wear a life jacket when: (a) working alone, or (b) there are insufficient resources to provide a quick and effective rescue.
4. Employer and contractor must each ensure that an employee wears a life jacket or flotation device referred to in paragraphs (1)(b) to (d) when being transported in a boat.
5. If an employee works on ice and the water under the ice is more than 1 m in depth, employer and a contractor must each test the ice before beginning any work and after work begins as necessary to ensure that the ice will support any load placed on it.
6. If an automatically inflatable personal flotation device is used, employer and employee must each ensure that: (a) the device is inspected and maintained by a competent person in accordance with the manufacturer's

specifications, and (b) the date and details of the inspection and maintenance are recorded.

7. If an employee may fall into water or any other liquid and may require assistance to return to a place of safety, employer and contractor must each ensure that a copy of emergency procedures is posted at the place of employment, and that it contains: (a) a full description of the emergency procedures, including the responsibilities of all employees granted access to the place of employment; and (b) the location of any emergency equipment and the name of the employee designated to operate the equipment;
8. Emergency procedures must include the following, as applicable: (a) with regards to water or another liquid, (i) its temperature, (ii) its depth, and (iii) its flow; (b) any water traffic; (c) the distance to the rescue boat; (d) the distance to reach an employee; (e) any projections or objects beneath the surface; (f) any visibility issues; (g) the time of day; and (h) any adverse weather conditions;
9. If an employee may fall into water or any other liquid and may require assistance to return to a place of safety, employer and contractor must each ensure that: (a) appropriate emergency equipment is ready to be used, (b) a person who's competent to operate the emergency equipment is readily available to provide assistance, and (c) an alarm system is provided to signal the need for a rescue.
10. Employer and contractor must each ensure that an employee wears a life jacket or a personal flotation device when participating in a rescue; and
11. If an employer or contractor provides a boat for use in an emergency, the employer or contractor must ensure that the rescue boat: (a) is equipped with a life ring or buoy that's attached to 30 m of rope and a boat hook, and (b) is motorized if the water is likely to be rough or swift (*OHS Gen. Reg., Sec. 51*); Definitions:

“automatically inflatable personal flotation device”: a device that provides buoyancy through an automatic inflation mechanism with an oral inflation system as a back-up and when worn correctly supports a conscious employee in an upright or backward leaning position, but isn’t designed to turn an employee from a face-down to a face-up position in the water; “life jacket”: an inherently buoyant device that when worn correctly supports a conscious or unconscious employee in an upright or backward leaning position and is designed to turn an employee from a face-down to a face-up position in the water; “personal flotation device:” an inherently buoyant device that when worn correctly supports a conscious employee in an upright or backward leaning position, but isn’t designed to turn an employee from a face-down to a face-up position in the water, and includes devices that are designed to protect an employee against hypothermia

## **NEWFOUNDLAND**

1. A worker at risk of drowning must wear a personal flotation device appropriate to the work environment and hazards and that’s labelled and meet the requirements and standards of the Canadian General Standards Board;
2. A personal flotation device or lifejacket is not required when a personal fall protection system, safety net or other satisfactory means is being used according to Part X of the Reg.; and
3. A personal flotation device must not be dependent on manual manipulation to provide the buoyant effect (*OHS Regs.*, Sec. 466); Definitions: “lifejacket”: a device that, when worn correctly, provides a specified buoyancy that turns the wearer face-up on entering the water and keeps the wearer in this position; and “personal flotation device”: a device that, when worn correctly,

provides a specified buoyancy to support a conscious person in an upright or backward leaning position, but is not designed to turn a person from a face-down to a face-up position in the water

## **NOVA SCOTIA**

1. If a person is exposed to risk of drowning at a workplace, employer must either: (a) select, provide and ensure the use of a life jacket or personal flotation device for the person; or (b) provide an alternative means of protection that ensures an equivalent level of safety to prevent person from drowning;
2. If a person working alone is exposed to the risk of drowning and isn't visible to or within hearing distance of another person who's in a position to immediately come to their aid, an employer complying following the option listed in Section 1(a) above must ensure the life jacket or personal flotation device selected, provided and used by the person is designed to provide buoyancy without any effort by the user and to rotate an unconscious person to an upward facing position in the water;
3. Any life jacket or personal floatation device must: (a) be approved by Transport Canada, Canadian Coast Guard or US Coast Guard; (b) be appropriate for the weight of the person who will wear it; and (c) have sufficient buoyancy to keep the person's head above water;
4. If a person is exposed to the risk of drowning at a workplace, employer must provide all of the following rescue equipment: (a) a life buoy with 15 m of polypropylene rope that's at least 10 mm in diameter or made from material that provides an equivalent level of protection; (b) a boat hook; (c) an audible alarm system to notify of an accident and initiate the rescue procedure; and (d) an adequate motor boat to ensure a

- safe and timely rescue, if appropriate;
5. If a person is exposed to the risk of drowning at a workplace, employer must ensure that enough employees are: (a) designated to perform specific rescue tasks; (b) informed as to adequate rescue procedures; and (c) trained in the rescue procedures and use of rescue equipment so that they can perform rescue operations safely;
  6. If work is done above water with a fast current, if reasonably practicable, a line that meets all of the following criteria must be placed across the water: (a) it's made of polypropylene rope 10 mm in diameter or material providing an equivalent level of protection; (b) it has buoys or some other flotation device attached to it; and
  7. A person exposed to the risk of drowning must wear a life jacket or personal flotation device as required by this Section (*Occ. Safety Gen. Regs.*, Sec. 14);  
Definition: "personal flotation device": PPE capable of supporting a person with their head above water without the direct effort of the person wearing the equipment.

## **ONTARIO**

**Industrial Establishments:** Where a worker is exposed to risk of falling into liquid that's deep enough for a life jacket or other personal flotation device to be effective as protection from risk of drowning, there must be an alarm system and rescue equipment, appropriate in the circumstances, to ensure the worker's rescue from the liquid and: (a) the worker must wear a life jacket or other personal flotation device appropriate in the circumstances; or (b) the employer must develop and implement written measures and procedures to prevent the worker from drowning (*OHS Indust. Ests. Regs.*, Sec. 86)

## **Construction Projects:**

1. A worker must wear a lifejacket or other adequate personal flotation device if: (a) the worker is exposed to risk of drowning on a project; and (b) It's not reasonably possible to install a guardrail system as subsection 26.1(1) of the regulation requires; and (c) It's not reasonably possible to protect the worker adequately by means of a fall protection method as subsection 26.1 (2) requires;
2. If a worker may drown at a project: (a) at least 2 workers trained to perform rescue operations must be available to perform rescue operations; (b) rescue equipment must be provided in a suitable location on or near the project; and (c) all workers on the project must be advised of the rescue procedures to be followed and their role, if any, in carrying out a rescue;
3. The rescue equipment must include: (a) a seaworthy boat equipped with a lifebuoy attached to a buoyant heaving line not less than 15 metres in length and a boat hook; and (b) an alarm system capable of warning a worker of the necessity of carrying out a rescue operation;
4. The boat must be power-driven if the water is likely to be rough or swift; and
5. The alarm system must be activated when a rescue operation is necessary (*OHS Const. Projects Regs.*, Sec. 27)

## **PRINCE EDWARD ISLAND**

1. Employer must ensure that a worker employed under conditions that involve a risk of drowning is provided with and wears at all times a lifejacket or personal flotation device that's: (a) suitable to the workplace conditions; and (b) of the correct size and appropriate for the weight of the worker who will wear it;
2. The above doesn't apply if: (a) other sufficient safety measures are in place to protect a worker from falling

into water, including but not limited to a guardrail or safety net installed and used in accordance with the regulatory requirements; (b) the worker is a lifeguard on duty; or (c) the worker is performing occupational diving tasks; and

3. If inflatable lifejackets or personal flotation devices are used, the employer must ensure that: (a) they're inspected and maintained in accordance with the manufacturer's instructions and recommendations; and (b) records of all inspections and maintenance are maintained for the life of the lifejacket or device (*OHS Gen. Regs.*, Secs. 45.4.1 and 45.4.2); Definitions: "lifejacket": a device that (i) provides a specified buoyancy that will turn the wearer face-up on entry to water and keep the wearer in that position, and (ii) is approved by Transport Canada, or agency permitted by Transport Canada to approve lifejackets, and bears a mark or label indicating that approval; and "personal flotation device": a device that (i) provides a specified buoyancy that will support a conscious person in an upright or backward-leaning position in water, and (ii) is approved by Transport Canada, or agency permitted by Transport Canada to approve personal flotation devices, and bears a mark or label indicating that approval

## QUÉBEC

1. The following requirements cover work involving a risk of drowning in water, including on a deck boat or open boat, except for underwater work or where the worker is adequately protected from falling into water by common protective devices or equipment;
2. Worker is deemed at risk of drowning when they're above or at less than 2 m from a location where the depth of the water exceeds 1.2 m over more than 2 m in width or a

location where the water flow may carry a person away;

3. The following information must be available in writing at the workplace before the work begins: (A) risks associated with work conditions, according to real data or, if real data is unavailable, estimated data, in particular information on (a) the characteristics of the body of water or watercourse, including i. the depth and flow of the water; ii. waves, currents and tides; and iii. the temperature of the water; (b) the weather conditions during the work; (c) the characteristics of the workstations and travelways, including i. the condition of the surface at the water's edge and the slope to reach it; and ii. transportation or movement on the water; (d) the equipment, work methods and site location, including means of communication; and (e) the clothing and equipment to be worn to perform the work; (B) the prevention measures to be taken to protect the health and ensure the safety and physical well-being of workers, in particular with respect to (a) measures for preventing drowning ; and (b) the rescue measures in the rescue plan and the time for recovering a person who has fallen into the water;
4. The information referred to in subparagraphs A and B above must be determined by a qualified person, i.e., one who, by reason of knowledge, training or experience, is able to identify, assess and control the risks of drowning;
5. Before beginning the work, the information referred to in subparagraphs A and B above must be conveyed and explained to the worker by a person capable of adequately informing the worker on how to perform the work safely;
6. Where no other safety measure may provide efficient protection, worker must wear a personal floatation device or a life jacket adapted to the work conditions and with enough floatability to keep the worker's head above water and which also: (a) is of the right size;

(b) is bright in colour and equipped with reflecting strips visible when in water; (c) is equipped with a whistle; (d) is equipped with a locator device, such as a light or locator beacon, where the weather conditions or waves interfere with location in water; and (e) bears a Transport Canada approval stamp or tag or is approved compliant with ISO Standard 12402, Personal flotation devices; (f) Must be approved by Transport Canada if it's used for navigation; (g) Must have a minimum floatability of 69 N (15.5 lbs) and, in whitewater, floatability must be ensured by buoyant materials, regardless of the floatability level required—where floatability requires more than 69 N and the site isn't in whitewater, floatability may be ensured by buoyant materials, an automatic inflatable system activated upon immersion or a combination of the two;

7. A personal flotation device or life jacket must be maintained and checked in accordance with the manufacturer's instructions;
8. A rescue plan including the estimated response time, equipment and measures for rescuing a worker who fell into water within that time must be prepared;
9. The equipment required by a rescue plan and any accessories must be (a) adapted to the intended use, the conditions specific to the work and the characteristics of the body of water or the watercourse; (b) checked and kept in good order; and (c) in place and easily accessible on the work site to be able to respond rapidly;
10. The rescue plan must include a call and communication protocol to initiate rescue operations and a specific person must be appointed for directing rescue operations;
11. The rescue plan must be tested via drills that enable workers to become familiar with their role, the communication protocol and the use of the rescue equipment provided;

12. Where the rescue plan provides for the use of a rescue boat, the boat must meet the following conditions in addition to the requirements set out in Section 9 above:
  - (a) be adapted and equipped for the search and recovery of persons;
  - (b) be equipped with a propulsion system adapted to the boat;
  - (c) be equipped with the following rescue equipment:
    - i. 2 rope bags, each containing 1 single-length buoyant heaving line that remains flexible, with a minimum diameter of 9.5 mm and a minimum length of 15 m;
    - ii. a life buoy with a minimum outside diameter of 762 mm attached to a buoyant heaving line and approved by Transport Canada as evidenced by the tag or approval stamp affixed to it;
    - iii. a boat hook;
  - (d) be used by a team of at least 2 rescue attendants trained in the approach and recovery of a person in the conditions set out in subparagraph A of subsection 3. above;
13. Where the response time provided for in the rescue plan is greater than 15 minutes and the water temperature is less than 15 °C, a worker must wear thermal protective clothing sufficient to prevent hypothermia during the response time provided for in the rescue plan (*OHS Regs.*, Secs. 312.92 to 312.100)

## **SASKATCHEWAN**

1. If a worker is required to work at a place from which they could fall and drown and that's not protected by a guardrail, an employer or contractor must:
  - (a) provide the worker with and ensure they use a life jacket, and ensure that the rescue equipment and personnel described in subsection 3 below are readily available;
  - (b) provide the worker with and ensure they use a full-body harness and lifeline; or
  - (c) ensure that a net is installed that's capable of safely catching the worker if the worker falls;

2. The rescue equipment and personnel required by subsection 1 above must consist of: (a) a suitable boat equipped with a boat hook; (b) a buoyant apparatus attached to a nylon rope that is not less than 9 millimetres in diameter and not less than 15 metres long; and (c) a sufficient number of properly equipped and trained workers to implement rescue procedures; and
3. Employer or contractor must ensure that a life jacket or personal flotation device is provided for each worker transported by boat or works from a boat, and that each worker uses the life jacket or personal flotation device at all times when in the boat (*OHS Regs.*, Sec. 7-22);  
Definitions: "Buoyant apparatus": a device capable of supporting the weight in water of a worker and constructed to: (a) remain stable when floating on either side; (b) have no projections that would prevent the buoyant apparatus from sliding easily over the side of a boat or ship; and (c) require no adjustment before use; "life jacket": an approved device capable of keeping a worker's head above water in a face-up position without effort by the worker; "personal flotation device": an approved device capable of keeping a worker's head above water without effort by the worker, and includes a device designed to protect a worker against hypothermia

## **NORTHWEST TERRITORIES & NUNAVUT**

1. If a worker is required to work at a place from which they could fall and drown and that's not protected by a guardrail, an employer or contractor must: (a) provide the worker and with and ensure they use a life jacket, and ensure that the rescue equipment and personnel described in subsection 3 below are readily available; (b) provide the worker with and ensure they use a full-body harness and lifeline; or (c) ensure that a net is

installed that's capable of safely catching the worker if the worker falls;

2. The rescue equipment and personnel required by subsection 1 above must consist of: (a) a suitable boat equipped with a boat hook; (b) a buoyant apparatus attached to a nylon rope that is not less than 9 millimetres in diameter and not less than 15 metres long; and (c) a sufficient number of properly equipped and trained workers to implement rescue procedures; and
  3. Employer or contractor must ensure that a life jacket or personal flotation device is provided for each worker transported by boat or works from a boat, and that each worker uses the life jacket or personal flotation device at all times when in the boat (*OHS Regs.*, Sec. 110);
- Definitions: "Buoyant apparatus": a device capable of supporting the weight in water of a worker and constructed to: (a) remain stable when floating on either side; (b) have no projections that would prevent the buoyant apparatus from sliding easily over the side of a boat or ship; and (c) require no adjustment before use; "life jacket": an approved device capable of keeping a worker's head above water in a face-up position without effort by the worker; "personal flotation device": an approved device capable of keeping a worker's head above water without effort by the worker, and includes a device designed to protect a worker against hypothermia

## YUKON

1. Each worker employed in a situation where there is a risk of drowning must be provided with, and be required to use, an appropriate personal flotation device with the required buoyancy unless either: (a) other safety measures acceptable to the board are in place that will protect workers from the risk of drowning, or (b) the

water is too shallow to allow the personal flotation device to function effectively;

2. Personal flotation equipment provided to worker must not require any manual manipulation to produce buoyancy, and must be appropriately labelled and meet the requirements of: (a) CGSB Standard B-65.11-M88, Personal Floatation Devices, (b) CGSB Standard 65.7-M88, Lifejackets, Inherently Buoyant Type, (c) CGSB Standard 65-GP-14M, Lifejackets, Inherently Buoyant, Standard Type, or (d) other similar standards acceptable to the board; and
3. Auto-inflatable life jackets may only be used if they're inspected and maintained in accordance with the manufacturer's instructions and recommendations, and records of all inspections and maintenance are maintained (*WSC Regs.*, Secs. 1.34 and 1.35)