Preventionnist in waterfront areas

Lesson plan

LIFESAVING SOCIETY

Preventionnist in waterfront areas

Introduction

The Lifesaving Society is an expert authority recognized as reference center to establish standards on drowning and water related trauma prevention.

The Preventionnist in waterfront areas course is intended for those working on or near water in order to implement concrete actions to prevent water related incidents. This course aims at acquiring a competency, which is the ability to use skills and knowledge and to make safe choices, to secure a work environment and properly respond to an emergency occurring in a body of water.

More specifically, the Preventionnist in waterfront areas course aims at developing the candidate's skills and knowledge regarding water safety. This course is suited to candidates' work environment and develops on the one hand an understanding of the dangers related to works nearby or on water, and on the other hand, the safe behaviours to adopt in order to prevent any accidental fall in water. The course also facilitates the evaluation process enabling candidates to identify various situations and dangerous components that can be life-threatening for workers and prepares them to perform self-rescue techniques after a fall into water and to intervene with their colleagues by using basic waterfront rescue techniques.

Overview

The Preventionnist in water areas course is recognized by the Safety Code for the construction industry and more specifically by the regulation about work carried out above or near water. The course includes practical and theoretical in-class activities.

Target clientele

- Anyone working nearby or on water

Time required

- One day (7 hours)

Prerequisite

- None

Ratio

- 1 trainer by 12 candidates

Validity

- 3 years

Objectives and standards

Competency statement	Context of achievement
To secure a work environment and properly respond to an emergency occurring in a watercourse	▪ In-class practical activities ▪ Lifesaving equipment required to perform self-rescue or to intervene with a colleague ▪ Reference documents created by the Lifesaving Society
Competency components	**Performance criteria**
To explain the various regulations about the safety of those working above or near water	▪ Appropriate reference to the Regulation respecting occupational health and safety, more specifically about the protection against falls and the use of flotation device and safety equipment ▪ Reference to the Act respecting occupational health and safety and the Safety Code for the construction industry ▪ Effective use of reference materials
Recognize features of the various water bodies and their dangers	▪ Identification of dangers related to each type of water body (still water, runs) ▪ Recognition of the runs' components ▪ Quick recognition of the dangers related to rivers and runs
To recognize features of ice and its dangers	▪ Identification of types of ice ▪ Identification of components of ice and factors that can affect its strength ▪ Quick recognition of dangers related to ice and hypothermia ▪ Capacity to measure the thickness of the ice and to determine the requirements for being on it safely
To prepare the equipment required to perform a work above or near water	▪ Preparation of an exhaustive check list for the safety equipment required to perform a work above or near water ▪ Preparation and verification of the lifesaving equipment before and after an operation above or near water ▪ Appropriate use of terms specific to lifesaving equipment
To establish a work plan, a rescue plan and a transportation plan suited to the work specific conditions and the water features	▪ Identification of each person responsible for operations and equipment maintenance ▪ Identification of the roles and responsibilities of each responder ▪ Identification of the information to transmit to workers regarding safety instructions and emergency measures ▪ Drafting of an emergency plan outlining proper actions to be taken
To use established emergency procedures to respond to an emergency near water	▪ Compliance with procedures during simulated intervention ▪ Adequate communication during emergencies
To use self-rescue techniques in a distress situation occurring in water	▪ Explanation of actions to take in compliance with techniques described in the Lifesaving society material ▪ Adequate choice of equipment and craft according to the situation ▪ Adequate response according to the situation
To intervene with a person in distress in a body of water without using a craft	▪ Respect of the ladder approach to reduce risks as much as possible ▪ Adequate use of lifesaving equipment

Training content

Laws and regulations

Theoretical notions about requirements arising from federal and provincial legislation concerning works nearby or on water and boat operation:

- Act respecting occupational health and safety
- Regulation respecting occupational health and safety
- Safety Code for the construction industry
- Canada Shipping Act (Transport Canada)
- Small Vessel Regulations
- Competency of Operators of Pleasure Craft Regulations

Water bodies features

Theoretical notions about bodies of water types and related dangers that can be faced by workers:

- Still water and whitewater features
- Icefield features
- Natural and human-induced dangers that can be faced on the different bodies of water
- Ice related dangers
- Precautions to take to avoid a fall in the water

Safety and lifesaving equipment

Theoretical notions about the use and features of the equipment required to work near or above water and to recover a victim from the water:

- Individual protective equipment:
  - Life jacket
  - Personal flotation device
  - Hypothermia protective garment
  - Safety harness, helmet
- Rescue equipment:
  - Throw bag
  - Reaching pole
  - Ring buoy
- Boats:
  - Types of boat (used for work, transport or rescue)
  - Transport Canada standards (compliance notices, licence for commercial boats, safety equipment, etc.)

Water related traumas

Theoretical notions about traumas occurring on or near water that need to be recognized end prevented:

- Drowning:
  - Definition and steps of drowning
  - Statistics
- Other traumas:
  - Non-swimmer
  - Person with reduced swimming skills (heavy equipment, bad swimmer, etc.)
  - Injured person
  - Unconscious person in the water
- Hypothermia:
  - Definition and causes of hypothermia
  - Recognition and prevention
  - Cold shock and hypothermia by immersion (rule of 1-10-1)
  - Hypothermia treatment

Self-rescue and intervention

Theoretical notions about self-rescue techniques and intervention with a colleague in distress in the water:

- Self-rescue in still water techniques:
  - Cold water immersion
  - Immersion from a boat (fall into the water, overturned boat, etc.)
- Self-rescue in whitewater techniques:
  - Position to adopt (defensive swimming)
  - Passing strainers
  - Surviving a hole
- Self-rescue on ice:
  - Ladder approach for ice rescue
  - Techniques for getting out of the water after a fall through ice
- Intervention with a person in distress:
  - Ladder approach
  - Throw bag
  - Ring buoy
  - Reaching pole

Reference Material

Boat Rescue for First Responders, Candidate Manual, Lifesaving Society, 1997, 90 pages.

Swiftwater Rescue, Lifesaving Society and Fédération québécoise du canot et du kayak, 2007, 118 pages.

BOAT Stydy Guide, Ninth Printing, Lifesaving Society, 2011, 74 pages.

Websites

Cold Water Boot Camp
[On line], [www.coldwaterbootcamp.com] (Accessed May 27, 2013)

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