
Working on Ice Standard

1.0 PURPOSE

This standard supports the Hazard/Aspect Control Policy and specifies the requirements for working on ice.

2.0 DEFINITIONS

2.1 Axe or Ice Chisel

A tool typically with a steel blade attached at a right angle to a wooden handle or a long-handled chisel for cutting holes in ice to test ice up to 30 centimeters thick.

2.2 Bad Quality Ice

Natural flood (white) ice, which occurs when water floods the surface of natural ice, can be of lesser quality due to the presence of snow and unfrozen water and has variable strength due to inconstant ice thickness. This ice can pose a greater hazard and should be avoided.

2.3 Belt or harness with D rings

A connector used integrally in a harness as an attachment element or fall arrest attachment and in lanyards, energy absorbers, lifelines, and anchorage connectors as an integral connector.

2.4 Good Quality Ice

Clear, good quality ice has uniform thickness and strength. It appears to be blue because it's clear enough to see the water underneath it. Clear ice is relatively free of air bubbles and vegetation.

2.5 Ice Picks

A tool used to grip and move along the ice to complete a self-rescue if the ice fails.

2.6 Lifejackets:

A Canadian approved standard lifejacket, when worn properly, is designed to turn an unconscious person from face down to face up in the water, allowing them to breathe. The standard lifejacket is keyhole style and comes in two sizes - one for people who weigh over 40 kg (90 lbs.), and one for people who weigh less than 40 kg (90 lbs.). Standard lifejackets must be orange, yellow or red, and have a whistle attached.

2.7 Personal Flotation Device

A Canadian approved device that is capable of keeping a worker's head above water without effort by the conscious worker and may include a device that is designed to protect a worker from hypothermia.

A Canadian approved PFD is designed to keep you afloat in the water.

PFDs were designed for use in recreational boating and are generally smaller, less bulky and more comfortable than lifejackets. They have less flotation than lifejackets, and have limited turning capacity, but are available in a variety of styles and colours.

2.8 Polypropylene Rescue Rope

An approved device attached to the safety belt that is capable of floating used for testing of ice (tie off) and rescue.

3.0 METHOD / PRACTICE

3.1 Hazard/Aspect and Risk Assessments

Upon a hazard/aspect and risk assessment that identifies work will be done on ice, over a body of water, the worker shall;

- Refer to the SaskPower Working on Ice Standard Operating Procedures (SOP) for ice measurement guidelines.
- Choose an alternate route or isolation point when possible to avoid working on ice;
- Check the vehicles Gross Vehicle Weight (GVW) against ice thickness;
- Check the quality (clear, blue indicates good quality ice or white, cloudy ice indicates bad quality ice) of the ice visually prior to testing the ice;
- Chip the ice with an axe or hatchet to create a small hole in the ice, or use an ice auger for measuring the thickness and determining if the ice is of good or bad quality;
- Use a measuring device to determine the thickness;
- Testing must be done on the date the work on ice is being done;
- Have rescue equipment kept readily available;
- Not work alone if possible, or follow the Working Alone Standard;
- Inform any designated watch person of the emergency response plan, including contact information;
- Maintain situational awareness at all times.

3.2 Personal Protective Equipment (PPE)

- Standard PPE will be required for all activities being performed on ice in accordance with the PPE Policy.
- PPE specific to work activities on ice shall be provided and may include, but is not limited to a personal flotation device, axe or ice chisel, ice picks, 30 m (minimum) of 10 mm buoyant polypropylene rescue rope and/ or belt /harness with D rings, and ice cleats for boots.

4.0 TRAINING REQUIREMENTS AND MATERIAL

SaskPower shall provide information on the proper care, use; selection and limitations of approved life jackets and/or personal floatation devices from Transport Canada, Canadian Coast Guard, Fisheries and Oceans Canada or, any combination of the above. Employees should refer to the SaskPower Working on Ice Standard Operating Procedures (SOP) for ice measurement guidelines and related material.

5.0 REFERENCES

- Saskatchewan
 - Saskatchewan Occupational Health and Safety Regulations, 1996
- SaskPower (located on SafetyNet)
 - Personal Protective Equipment Policy
 - Hazard/Aspect and Risk Assessment Policy
 - Vehicle Recovery Standard

- Working Alone Standard
- Working On Ice Standard Operating Procedure (SOP)
- Alberta
 - Work Safe Alberta – Best Practice for Building and Working Safely on Ice Covers 2013
 - Work Safe Alberta – Field Guide to Working Safely on Ice Covers 2009