

# Working On, In or Near Water

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### **1.0** Purpose

This SOP provides:

• Approved methods to consider when working on, in or near water and the Safety and Environmental considerations.

### 2.0 Roles and Prerequisites

Role(s)	Quantity Required	Prerequisites
Worker(s)	1 or more (Recommended to have a second worker as a designated rescuer)	<ol> <li>Understanding of the requirements of this Standard Operating Procedure</li> <li>First Aid/CPR training</li> <li>Environmental Best Management Practices Training</li> </ol>

### **3.0 Tools and Equipment**

### Minimum Tools and Equipment Required:

- Canadian approved personal flotation device/life jacket(s)
- Waders (hip or chest)
- Steel toe rubber boots
- Rescue equipment: Life ring buoys, long ropes, and long handled life hooks (as required)
- Rescue boat (As required)
- Spill Kit Required in the event of any release of a contaminant into the water or on thin ice

### **4.0 Procedure**

### **High Level Flowchart**





### The Procedure

NOTE: The following requirements shall be met prior to the start of the procedure:

- Complete Hazard, Aspect and Risk Assessment
- Applicable Personal Protective Equipment (PPE) is available and in good condition
- Consider Environmental Best Management Practices and Permits required to complete the work
- Ensure spill kit is readily available in the event of an unplanned release of a contaminant into the water or onto thin ice

### CAUTION: No work is to be done on, in or near water when lightning is in the area

**NOTE:** In some circumstances workers may be allowed to work without personal flotation device/ life jackets. If workers are constantly protected from falling in the water by body harness, fully installed guardrail systems or safety nets. All other circumstances require the use of a personal flotation device/life jackets

If the work is to be performed on an ice surface, refer to the Working on Ice Standard Operating Procedure for calculations of ice thickness required

#### **1.0 Pre-work Checklist**

- 1.1 Pre-work checklist
  - 1.1.1 Worker(s) shall review the following before starting work on, in or near water:

**NOTE : It is critical that all workers maintain situational awareness at all times. Ensure workers are accounted for at all times** 

- If working alone, follow the working alone policy. There shall be no work alone in water deeper than .6m (2')
- Complete a hazard, aspect and risk assessment including environmental considerations
  - Reinforce the need to maintain situational awareness at all times with all workers
  - Identify depth of water
  - Temperature of the water
  - Weather Conditions:
    - Wind or the potential for strong winds
    - Visibility to the work location
    - o *Lightning*
  - Identify if water is flowing (Direction and current)
  - Determine the equipment required to safely perform the work required (Ie: Tracked digger, boat, hip/chest waders, ATV etc.)
  - Safest access to the work location. Also consider potential environmental impact when determining the route



- Life jackets, personal flotation devices, waders, etc. are available as required to perform the task at hand
- *Have necessary rescue equipment readily available*
- Document appropriate provisions for communication and emergency response plan with directions to all workers involved
- Flowing water
  - Severity of the current flow
  - Is there ice or debris floating in the moving water that could injure or cause the worker to lose their balance, injure a worker or damage equipment
  - Can the equipment safely and efficiently maneuver through the current
- When working with non-SaskPower responders in flood zones, workers shall determine muster points, person in charge and notify the Out of Scope Manager in charge for Region/Area of the work to be done
- 1.2 Methods to perform the work
  - 1.2.1 Walking into the work location
    - *Caution:* If a worker falls over into the water, the hip or chest waders can fill with water and make it extremely difficult to regain footing and get out of the water.
      - If using Chest Waders, the straps are to be over the PFD/Life Jacket for ease of removal if required
    - Life jacket or PFD is required when the depth of water is unknown. If the water is known to be deeper than .6m (2') a life jacket or PFD is required.
    - If working alone, follow the working alone policy. There shall be no work alone in water deeper than .6m (2')
    - A designated watch person is to remain on the shore with the rescue rope attached to the worker in the water
    - Walk carefully to ensure the best footing possible
    - Using a sturdy stick or shovel to determine if there are any holes or obstructions on the ground beneath the water ahead of the worker. This also ensures the worker does not exceed the depth of water in comparison to the height of the waders being used
    - Inform the designated watch person of the emergency plans and contact information in the event a worker loses footing and/or falls into the water, which could fill the waders with water and may hinder the worker to regain their footing



- 1.2.2 Considerations when determining the type of mobile equipment or boat to be used
  - Life Jacket or PFD is required when the depth of water is unknown. It is recommended that if the water is known to be deeper than .6m (2') that a life jacket or PFD is required.
  - Tracked equipment, depending on the water depth
  - Some examples of equipment designed to float on water: Argo, boat or other watercraft
  - The approximate total weight of personnel, equipment and material shall not exceed the total allowable weight that the equipment or boat is rated for
  - Stability required if work is to be done from within the equipment or boat
  - Known thin ice (To be attempted in emergency situations only)
    - This shall not be attempted when working alone
    - Refer to the Working on Ice SOP for calculating ice thickness requirements
    - When work is to be performed on thin ice, a small boat may be used to access the work location. Workers on the ice shall wear a PFD/Life Jacket and full body harness with lanyards securely attached to the boat as they walk alongside holding the boat on the ice surface
    - The boat shall have a rope attached which is monitored and held by a designated watch person(s) on the shore at all times. This is to ensure the workers can exit the water to safety quickly if the ice fails. There shall be a minimum of two workers holding the boat at all times to assist with the balance of the boat

### 1.3 Rig Mats

- 1.3.1 Rig Mat Considerations Determine the following:
  - Type and amount of rig mats required to access the work location
  - Path for rig mats to be placed
  - Is the water depth safe for vehicles or do the rig mats need to be stacked
  - Rig mats float anchoring may be required
  - Do the rig mats need to be chained together in order to recover them with ease
  - Are buoys required so the workers and equipment operator(s) know the location of the edge of the mats while driving/walking in and out of the water



### 2.0 Environmental Considerations

- 2.1 Spill Kit use
  - It is very important to watch for any release of a contaminant
  - The spill kit will absorb only a small release. If a larger release of contaminant has occurred, contact SaskPower Environmental Specialist or 566-6200 immediately to report the spill. Have as many details as possible
- 2.2 Environmental Permitting requirements
  - The In-Scope Supervisor shall review the shop papers to determine and follow the conditions of the Environmental Permit
  - Depending on the task to be performed and the type of waterbody, the Ministry of Environment (MOE) may require additional information and requirements to complete the job
  - An example of additional requirements may be:
    - Notification to MOE prior to start up
    - Coordinating with the local Environmental Monitor to be on site while the job is being performed
    - Closure reports to be completed at the end of the job, including pictures and specific information required on the Closure Report Form. If assistance is required to complete this form, contact a SaskPower Environmental Specialist

### **5.0 Components**

The following is a list of components for this SOP which can be accessed through the SOP System:

Component Name	Component Type	Component Description	Location of Component
Working On, In or Near Water SOP Flowchart	Flowchart	High Level Flowchart for this procedure	SOP Online - SOP Bundle: Working On, In or Near Water SOP Flowchart

### 6.0 Acronyms, Definitions and Symbols

#### Acronyms and Abbreviations

- PLT Power Line Technician
- **PFD Personal Floatation Device**

#### HARA - Hazard/Aspect and Risk Assessment



### Definitions

**Life Jacket** - A Canadian approved standard life jacket is designed to turn an unconscious person from face down to face up in the water.

**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.

**Waders (hip or chest)** - A waterproof boot extending from the foot to the thigh, hip or chest, traditionally made from vulcanized rubber, but available in more modern PVC, neoprene and Gore-Tex variants.

### Symbols

N/A

### 7.0 Policies and Regulatory Requirements

This SOP is a result of the following regulations, policies, industry standards, and corporate directives and standards:

### **Regulatory Requirement(s)**

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- Occupational Health and Safety Regulations 1996
  - Section 108

### Policies

- Hazard/Aspect and Risk Assessment Policy
- Personal Protective Equipment Policy
- T&D Working Alone Policy

#### Standards

- Deviation from Safe Work Procedures Standard
- Personal Protective Equipment Standard
- Hazard/Aspect and Risk Assessment Standard
- Working On, In or Near Water Standard
- Working Alone Standard
- Working on Ice Standard

### Other

- Safety and Environment Rulebook
- Environmental Best Management Practices



## Working On, In or Near Water

### 8.0 References

#### References

Flood Safety Directive Working on Ice Standard Operating Procedure