

# WESTERN CANADIAN SPILL SERVICES

# WATER SAFETY GUIDELINES

## Purpose

WCSS as custodian of the industry's spill preparedness equipment is responsible for ensuring operational safety guidelines are in place and equipment and equipment operation complies with all Canadian regulations and requirements. WCSS recognizes that worker safety is the overriding goal in any of its activities.

This policy sets out minimum standards for boat and shoreline crew safety, minimum qualifications for key personnel, the use of mandatory checklists for water activity hazard assessment and the assignment of safety functions and responsibilities at WCSS related activities.

These guidelines apply to all WCSS activities on, along, or around any water bodies and includes but is not limited to:

- Cooperative Area Exercises
- Member Company Spill Response and Exercises
- Research and Development Exercises
- Equipment Maintenance
- Non WCSS equipment used at WCSS or PITS sponsored training or exercises

## General Safety

- All personnel on site will receive a Safety briefing by a site safety officer or a person appointed by the On-Scene Commander or WCSS Representative.
- A Water Activity Hazard Assessment will be completed and the results communicated to all personnel on site by the On Scene Commander or WCSS Representative, or delegated to the site safety captain.
- All personnel will be accounted for on site by the person in charge of the operation, safety equipment will remain in place for the complete operation and until all persons are accounted for.
- If any person becomes aware of a situation, an accident or other incident arising in the course of or in connection with a WCSS activity, they must report the situation, accident or other incident to the On-Scene Commander, or WCSS Representative.
- Any person that has a medical condition that might affect their ability to safely operate WCSS equipment or work on site must advise their team captain, On-Scene Commander or WCSS Representative.
- Horse play or operation of WCSS boats in an unsafe manner or any manner that could endanger people, or damage the boats, other equipment or structures; public or private property, wildlife or the environment is prohibited.

- In addition to the On Scene Commander, Safety Officer and Crew Captains, everyone at a WCSS activity is responsible for safety and will ensure the site is regularly checked for hazards, and at the close of the operation the area is completely “Policed” for misplaced equipment and litter.

## **Boat Safety**

- Trip Plans will be filed before any boat leaves a custodian location. (see exemptions)
- Boat Crew and Passenger Briefing checklists must be completed before any boat leaves shore and any on-water activity takes place
- Boat Equipment and Service Checklists must be completed at the beginning and end of each day of operation
- All operations that involve the deployment of larger equipment (booms, anchors, shorelines etc.) will be conducted with a minimum of two appropriately sized boats with at least one boat being assigned safety boat duties.
- Boats must have a minimum crew of two before leaving shore (operator plus one).
- All personnel in a WCSS boat must wear a CCG approved Lifejacket or Personal Floatation Device.
- Marker Buoys are required if any area of the watercourse is obstructed from normal navigation (when any lines, booms, anchors or other “in water” equipment is tied to shore or across a channel or narrow channels obstructed by WCSS activities). Hazard and information buoys must be placed upstream and downstream with enough warning distance to allow users to safely navigate the hazard.
- If a boat or boats are being used with no shoreline crew or On Site Supervisor (one or more boats going on a river or lake run, site assessment etc.) a reliable means of communicating with a control person (trip plan holder) must be in place. In areas where there is no cellular or radio service, boat operators must research communication options (e.g. location of public telephones, satellite telephones, and other means of communication) and devise a communication plan which identifies a means of communication to be implemented in case of emergency.
- No boats are to operate within 400 meters upstream or 100 meters downstream of any low head dam, weir or water control structure.
- Live lines (lines from the boat to any other object) will be looped (not tied) in such a way that it can be released when under pressure, the line must be under the immediate control of a crew member. The only thing the boat should be tied to is the shore.
- Parked boats must be tied to the shore.
- Loading and unloading of equipment will only occur when the boat is secured to shore and stable.
- Equipment transported by boat must be secured in such a way that movement or shifting can not occur.
- No alcohol is allowed in the boats or along the shoreline at any time. Operation of the boats by persons impaired by drugs (both prescription and non-prescription) or alcohol is prohibited. Drivers suspended from operating a motor vehicle by an impaired driving conviction are prohibited from operating WCSS boats.

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### *Industry's Commitment to Spill Preparedness and Environmental Protection*

## Shoreline Safety

- Shoreline crew and observer briefing checklists must be completed before any activity takes place
- If chest waders are worn by personnel working on shore, in or near the water, they must have a waist belt capable of stopping water from entering the lower portion of the wader.
- The “buddy system” will be used for any shoreline crews where water entry is required.
- Shoreline safety equipment stations must be in place on any exercise or operation where shoreline crews are working in water.
- *Full body harnesses and safety lines will be used by shoreline crews that enter water with steep banks, or they are working immediately upstream of weirs, log jams, deep holes or rapids. These areas should be avoided if possible as equipment deployment sites.*

## Responsibilities

### On-Scene Commander / WCSS Representative:

- Overall site safety. Ensure site control, accident management plan and appropriate site safety and first aid personnel are in place.
- Ensure compliance with all WCSS, OH&S, industry guidelines and applicable regulations (accident reporting, spill reporting etc.)
- Brief team captains on the operation and their duties
- Approve Water Activity Hazard Assessment
- Exercise emergency authority to stop and prevent unsafe activities.

### Boat Captain (Boat Captain may also act as a boat operator):

- Safety briefing of boat operators
- Assign work boat and safety boat duties
- Participate in Water Activity Hazard Assessment
- Supervise all boat activities
- Set up traffic patterns and speed control for multi-boat operations
- Ensure effective communications between boats and shoreline
- Exercise emergency authority to stop and prevent unsafe activities.

### Boat Operators

- Responsible for the safety of the boat and crew
- Responsible for compliance to all boating legislation and WCSS Guidelines
- Ensure the Equipment & Service Checklist is completed (pre and post use)
- Complete Crew/Passenger Briefing Checklist
- Supervise equipment loading and securing
- Filing of Trip Plan with On Site Supervisor (or Responsible Person if no Supervisor or ground support present)
- Exercise emergency authority to stop and prevent unsafe activities.

#### Safety Boat

- Placement of any hazard or information buoys
- Ensure all public using the water way or immediate shoreline is notified of the operation and how to safely avoid the hazards
- Monitor the water and shoreline activities
- Act as a rescue boat

#### Boat Crew

- As assigned by Boat Captain or Boat Operator

#### Safety Captain (Safety Captain should not be assigned to work on a crew):

- Participate in the Water Activities Hazard Assessment
- Supervise the safety of all personnel
- Complete Shoreline Crew/Observer Briefing & Checklist
- Ensure appropriate placement of shoreline safety/rescue stations
- Exercise emergency authority to stop and prevent unsafe activities.

#### Shoreline Worker:

- As assigned by Captain or other team leaders

### **Qualifications**

#### Boat Captain

- Must be familiar with all WCSS Safety Guidelines & Applicable Legislation
- Must have successfully completed the PITS - WCSS Oil Spill Cooperative Boat Handling Course in the last 3 years.
- Additionally require minimum Transport Canada MED A4

#### Boat Operator

- Must be familiar with all WCSS Safety Guidelines & Applicable Legislation
- Must have successfully completed the PITS - WCSS Oil Spill Cooperative Boat Handling Course in the last 3 years.
- Additionally requires minimum Transport Canada MED A4

#### Boat Crew

- Must receive Crew/Passenger Briefing prior to leaving shore and conducting any on-water activity

## **PPE**

Acceptable Personal Protection Equipment for all Activities Covered by this Guideline will be as follows unless otherwise approved by the On Scene Commander or WCSS Representative:

- Safety foot wear
- Safety glasses/goggles
- Work gloves
- Fire retardant outer work wear
- Hard hat (not required for boat crew)
- CCG approved life jacket or PFD (required for all boat operations and some shoreline activities)

All protective equipment must be worn in a manner that does not create a hazard in itself (loose straps, catch hazards, wrong sized etc.) Everyone who uses personal protective equipment shall be trained in its use, operation and maintenance.

## **Hazard/Risk Assessment**

Before any on-water activity is started or boats leave shore a Water Activity Hazard Assessment must be conducted jointly by all team leaders, including the On-Scene Commander and Safety Captain. The results of the assessment must be communicated with all on-site personnel but most importantly with shoreline crews and boat personnel. The goal of the Water Activity Hazard Assessment is to identify risks, hazards and unsafe situations associated with each step of the activity and ensure appropriate safety and mitigation steps are taken to deal with the hazards. While not all problems can be foreseen the use of a checklist will reduce potential problems and safety concerns.

## **Communications**

All on-water activities must have a communication plan to ensure prompt and effective communication with boats, shoreline crews and On-Scene Commander or trip plan holder. The communication plan should make use of whatever technology is available. All boat operators and shoreline captains should be equipped with radios and trained in the use of the radios. Hand signals should also be reviewed and understood by all as a back-up communication system.

## **Other Approved Boat Use**

If a boat is used other than at an exercise, spill response, training or maintenance activity, that usage must:

- Have prior approval of WCSS (Equipment Coordinator or Managing Director)
- Follow all applicable legislation and WCSS Guidelines
- Ensure that duties described under Boat Operator and Crew Qualifications and Responsibilities are complied with.
- Ensure a tip plan is filed when necessary

## Forms & Checklists

- Water Activity Hazard Assessment
- Trip Plan
- Equipment & Service Check
- Boat Crew & Passenger Briefing Checklist
- Shoreline Crew & Observer Briefing Checklist
- Shoreline Safety/Rescue Station
- Aid Sheets – Trouble Shooting Guide
- Start-up & Launch procedures

## Legislation

Some portions of this guideline are requirements under various acts & regulations

- Boat Safety Equipment (Small Vessel Regulations & Transport Canada Regulations)
- Boat Operator Certification (Canada Shipping Act & Crew Regulations)
- Wearing of Lifejackets/PFD's (Alberta OH&S Regulations)
- Passenger & Crew Briefing Checklist (Transport Canada Regulations & CSA)
- Impaired/dangerous/suspended operation (Criminal Code & Small Vessel Regulations)
- Marker Buoys (Navigable Waters Act & Private Buoy Regulations)
- Vessel Inspections (Small Vessel Regulations & Transport Canada Regulations)
- Accident Reporting (Transport Canada - Marine Occurrences Regulations)

## Exemptions

Any exemptions to this guideline must be approved by WCSS. The filing of a Trip Plan is not required if all the following conditions are met:

- Boats are used on an area exercise, operation or training involving a site that the boat movements are confined to the immediate site area (always in sight).
- Multi-boat activities (more than one boat is deployed)
- A safety boat is assigned
- A radio communication system is in place between the boats
- A site control plan is in place
- The exemption is approved by the On-Scene Commander