

**ESSENTIAL  
STANDARDS  
no.3**

# Working Over or Near Water



## KEY MESSAGES

- When working over or near water, wherever possible provide collective protection measure e.g. hand rails which protect all those working in the area.
- Always plan the work and ensure the necessary equipment, materials and water safe PPE are in place and available to carry out the work safely.
- Anyone carrying out work over or near water must be trained on the use of water safe PPE and received instruction through the water awareness / water safety working courses about the hazards associated with this type of work, control measures and bank based methods of rescue.

## 1. Introduction

Working in, on or near water carries an increased level of risk for several reasons:

- Approximately 300 deaths a year occur through drowning – most within 3 metres of safety.
- Exposure to cold water can cause “cold shock” an inability to hold breath and an increased rate of breathing, heart rate and blood pressure, and the risk of hypothermia.
- Exposure to biological hazards, e.g. blue green algal blooms and sewage.
- Growth of plants and the formation of crusts.



Where applicable, physical protection measures are required and the use of water safe PPE must be properly planned and personnel must be trained and supervised.

## 2. Planning

Any areas where work needs to be carried out and, which are in, on, or near water, must be identified prior to work commencing and where possible, additional precautions taken e.g. protected by fixed guardrail and toe-boards.

Arrangements must be in place to ensure persons can be rescued if they fall in. Personnel need to be trained in bank based rescue through internal courses using a tiered hierarchy of response (The Formula - “Shout, Reach, Throw”) ensuring that only minimal risk is placed on the rescuer. On no account should personnel be expected to undertake swim rescues.



## 3. Undertaking Work Over or Near Water

Appropriate precautions should be taken to prevent people and materials from falling into the water / effluent. Where edge protection can be used it should meet the following requirements:

- Guard rails with a minimum height of 950mm.
- Intermediate guard rails or other rigid barriers so that there is no unprotected gap of more than 470mm.
- Toe boards with a minimum height of 150mm to prevent people from slipping under the intermediate rail and to prevent materials from falling in.



If fencing or guarding is not reasonable practicable, water safe PPE must be worn and personnel trained and supervised.



- Wherever possible do not use a safety harness as it is not appropriate due to the additional risk of water snag hazard. Life jackets must be worn at all times when working within 3 metres of water.



- Life jackets must be self-inflating with a minimum buoyancy of 275 newtons.
- Buoyancy aids are only suitable if the wearer intends to enter the water. They are not designed to turn an unconscious person so that the mouth and nose are above the water line.



- When working near to aerated water, the aeration process reduces water density and therefore extra buoyancy lifejackets (275 newtons) are required.

The need for good hygiene practices should be emphasised. All personnel should be reminded of the need to wash thoroughly before eating smoking or drinking. Any minor cuts and abrasions should be protected from contamination with water proof plasters. All activities that require the opening of observation grids, gratings or covers, that are above the size of 1.00m x 40cm above water whilst lone working are PROHIBITED.



## 4. Driving in Floodwater

Driving in floodwater carries additional risk to the driver/passengers, and bystanders.

A normal car can be carried away in as little as 30cm of water; 4 x 4 vehicles in 45cm of water. Do not drive in water deeper than the vehicle tyre (standard car) or the centre of the wheel (4 x 4). Floodwater can also obscure pot holes, manholes or even the road edge.

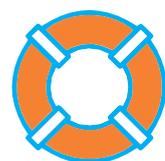
Be aware of the potential for flooding of the engine or stalling. Minimise wash/bow wave by only driving at a slow speed and being constantly aware of your surroundings. Should a vehicle become stranded, think about how it may move relative to the water flow and on no account exit immediately up or downstream to minimise the chance of being pinned. Be aware that the vehicle is also more likely to move as the weight of passengers are taken off the suspension.



## 5. Rescue

Sufficient rescue equipment must be provided immediately next to the work location e.g. life rings with hauling lines/or throwing lines.

Means of communication must be provided so that emergency services can be contacted if an incident occurs e.g. a fully charged mobile phone or radio. Supervisors should check whether phone signal coverage is adequate.



## 6. Maintenance and Inspection

- All water safe PPE must be inspected visually every time they are used to ensure they are within test and have not been previously deployed. On no account should users attempt to access the actuating mechanism or cylinder.
- All water safe PPE should also be regularly checked. Checks should include the general condition. A record of these checks should be maintained.
- Life jackets should be maintained in accordance with the manufacturer's instructions through the safety services team.
- Every month life rings and throwing lines should be checked for deterioration.



## 7. Training and Competence

All persons required to use water safe PPE must be instructed in their correct use, limitations, and characteristics.

