
# RECREATIONAL DIVING PROJECTS RISK ASSESSMENT GUIDANCE

## FOR DIVE PROFESSIONALS

Scuba
Industries
Trade
Association

THE GOVERNING BODY OF THE
RECREATIONAL SCUBA DIVING INDUSTRY

# Introduction

This booklet contains notes and suggestions on the process of developing a risk assessment document for your diving at work operations. It advises you as a Contractor and/or Supervisor on how to minimise the risk when conducting recreational diving activities. This document and its recommendations have been developed in coordination with all the UK diver trainer organisations. It represents an industry wide guide to assist those working in Great Britain to comply with the Risk Assessment requirements of the Diving at Work Regulations 1997.

## Definitions

Hazard - anything with the potential to cause harm.
Risk - the likelihood that someone or something would be harmed by the hazard.

## *Sources of Information*

| | |
|---|---|
| **Legislation**<br>Diving at Work Regulations 1997 - (Statutory Instruments 1997 No. 2776) - ISBN 0-11-065170-7 | **Approved Code of Practice**<br>Recreational Diving Projects - HSE Books L105 - ISBN 0-7176-1496-4 |
| **Information Leaflets**<br>Are you involved in a Diving Project? - HSE leaflet INDG266<br>Five Steps to Risk Assessment - HSE leaflet INDG163 (rev 1) | **For further health and safety information**<br>HSE website at www.hse.gov.uk<br>Leaflets can be downloaded from this website free of charge |
| **To order HSE Regulations**<br>The Stationary Office, PO Box 276, London SW8 5DT -<br>Tel: 0870 600 5522 -<br>fax: 0207 873 8200 -<br>website: www.hmso.gov.uk | **To order HSE publications**<br>HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA -<br>Tel: 01787 881165 -<br>fax: 01787 313995 -<br>website: www.hsebooks.co.uk |
| **For all your enquiries on workplace health and safety**<br>HSE Infoline, HSE Information Services, Caerphilly Business Park, Caerphilly<br>CF83 3GG - Tel: 08701 545500 - fax: 02920 859260 -<br>Email: hseinformationservices@natbrit.com | |

# *What is Risk Assessment?*

A Risk Assessment is nothing more than a common sense approach to identifying significant hazards; who or what is likely to be affected by those hazards; the risks associated with those hazards and what measures you will take to control the risks thereby reducing the harm to anyone or anything during any dive or diver training operation, and then recording what you have done. You will need to review the assessment periodically or whenever there is significant change.
The important thing to decide is whether an identified hazard is significant, and whether you can ensure the risk of harm is low or negligible before embarking on your dive.

Risk assessment is already inherent in the way divers go about organising their diving and training through careful dive preparation and planning.

The consideration of risk inherent in diver training and supervised dives is already paramount in all diver training organisations' course contents, standards and procedures.

A Risk Assessment is simply a way of recording the significant hazards and what measures you will take to reduce the risk of harm on each and every dive. Don't be over complicated. Checking for hazards is common sense.

In taking action, ask yourself these two questions:
Can I get rid of the hazard altogether?  If not, how can I control the risks so that harm is unlikely?

For example:-
**Hazard:** **Cold water**
**Risk of**: Hypothermia
**Risk Control Measure:** Choose appropriate, well fitting exposure protection in good order; reduce dive time; monitor student divers carefully for early signs of cold; brief student divers on appropriate signals to indicate chill; prepare to exit water early if necessary; have warm clothing and shelter available at site.

## Generic vs On Site Risk Assessment

A Diving Contractor is responsible for ensuring that before the start of the diving activity (project), a suitable generic risk assessment has been prepared. Generic risks are those that you have fore knowledge of and can therefore put control measures in place in advance of the activity.

This generic risk assessment should be supplemented with an on site risk assessment immediately before the dive, detailing any previously unforeseen hazards and the special precautions or procedures necessary to reduce the risk; as well as re-evaluating those on the generic risk assessment.

Hazards and risks should be continuously monitored during any dive or diving related activity. Dive Supervisors should be prepared to put any contingency plans into place at any point during the dive.

## How to Build a Risk Assessment Document

Here are some example significant potential hazards, their consequences and risk control measure recommendations, to help you build your own generic and on site risk assessments.
**Please be aware that this is a non exhaustive list of examples.**

Diving is inherently a hazardous activity; however, the known risks are already minimised to some degree by adherence to your diver training organisations' standards and procedures, e.g. the likelihood of a diver having a mask squeeze is minimised as mask equalisation techniques are taught to all divers in the earliest stages of training. This is therefore no longer a significant hazard as the control measure is in place whilst adhering to your diver training organisations' course contents, standards and procedures.

## Potential Hazards, Risks and Risk Control Measures
## KEY: B = Boat P = Pool S = Shore

**Hazard:** **Low visibility**
**Risk of:** Diver separation leading to diver injury
**Possible Risk Control Measure:** Reduce student to instructor ratios accordingly; ensure diver separation procedures are included in briefing. Abort dive if necessary. **S/B**

**Hazard:** **Debris**
**Risk of:** Physical injury to diver
**Possible Risk Control Measure:** Change entry and exit sites; change dive sites; move debris; change method of entry; abort dive. **S**

**Hazard:** **Cold water**
**Risk of:** Equipment failure/malfunction
**Possible Risk Control Measure:** Choose appropriate equipment for the environment. Ensure that only well maintained, regularly serviced equipment is used. **S/B**

**Hazard:** **Wet decks**
**Risk of:** Injury to diver, eg; slipping
**Possible Risk Control Measure:** Brief facility rules. eg; No running. No walking with fins on. Buddy assistance with donning and removing dive kit. **P/B**

**Hazard:** **Trips and falls**
**Risk of:** Injury to diver
**Possible Risk Control Measure:** Brief divers on how to put on and take off scuba equipment and to be aware of and look out for possible obstacles in their path whilst walking or moving in diving equipment. Brief divers to carry any diving equipment with caution. **P/S/B**

**Hazard:** **Running out of gas**
**Risk of:** Injury to diver (DCI, lung over expansion injury, drowning, death).

**Possible Risk Control Measure:** Ensure cylinders are adequately filled before entering the water. Ensure cylinder valve is open. Ensure equipment is in good working order and in service. Brief divers to monitor their gas supply during dive and on emergency out of air procedures. Ensure all divers entering the water perform a buddy check. **S/B**

**Hazard:** **Fishing line, nets, kelp, obstructions**
**Risk of:** Panic, entrapment or entanglement, injury to diver, running out of air.
**Possible Risk Control Measure:** Ensure equipment is streamlined on all divers. Ensure buddy procedures in place. Ensure divers have diving tool/knife for cutting or attracting attention. Change site or dive plan if necessary. **S/B**

**Hazard:** **Deteriorating weather**
**Risk of:** Injury to divers
**Possible Risk Control Measure:** Plan dive using updated weather forecast. Have contingency site. Continuously monitor conditions prior to and during dive. Reassess student diver comfort level. Diver recall system in place. Abort dive if necessary. If diving from a boat notify coastguard of position in advance. **S/B**

**Hazard:** **Boat propeller**
**Risk of:** Injury to diver
**Possible Risk Control Measure:** Only competent skippers to operate boat. Brief boat exit and entry techniques. Whilst on the surface all activities are controlled by the skipper. Brief divers to look and listen for boat during ascent. Advise location for safety stops. Use surface markers wherever feasible. **B**

**Hazard:** **Currents**
**Risk of:** Diver separation
**Possible Risk Control Measure:** Agree dive plan with skipper. Buddy procedures in place. Utilise tide tables where appropriate. Plan to start dive against current (unless drift dive). Monitor air and diver comfort continuously. Be prepared to abort dive. Consider carrying appropriate surface detection aids. Have contingency exit points available. **S/B**

# *Example Generic & On Site Risk Assessments*

| Hazard | Risk of: | Generic Risk Control Measure |
|---|---|---|
| Cold Water | Equipment Malfunction | Choose appropriate equipment for the environment. Ensure that only well maintained, regularly serviced equipment is used |
| Cold Water | Hypothermia | Choose appropriate, well fitting exposure protection in good order; reduce dive time; monitor student divers carefully for early signs of cold; brief student divers on appropriate signals to indicate chill; prepare to exit water early if necessary; have warm clothing and shelter available at site. |
| Potential Low visibility | Diver separation | Maximum ratio defined by Contractor/Supervisor; (ratio may be reduced further pending site specific risk assessment); Buddy separation procedures in briefing for divers |

| Hazard | Risk of: | On Site Risk Control Measure |
|---|---|---|
| Debris at entry site | Injury to diver | Select alternate entry site |
| Lower than expected visibility (be specific) | Diver separation | Reduce ratios (be specific); Buddy separation procedures in briefing for divers |

*Please note, the above are random samples of potential hazards and do not constitute a full risk assessment.*

# SITA Publication

**This publication was produced in association with the Health and Safety Executive, and the following scuba training organisations**











**Scuba Industries Trade Association**
**29 Ravenswood Avenue, West Wickham, Kent BR4 0PN**
**Tel: 020 8777 6740 Fax: 020 8777 3349**
**pat@ sita.org.uk www.sita.org.uk**