**UK ADC Ltd** (Issue 5 - 2021)

The Association represents
Diving Contractors who are
involved with Inland or
Inshore diving operations in
the UK and Ireland



# **Engaging Diving Contractors**For

**Inland/Inshore Diving Projects** 



This reference document is applicable for diving operations to a maximum water depth of 50m

(Includes reference to the second edition of the ACoP L104, released in December 2014)

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The Association of Diving Contractors (UK ADC Ltd) is the trade association representing diving contractors working Inland/Inshore in the UK and Ireland that constantly seeks to:

Cultivate and promote the art and science of commercial diving within the context of the activities of its members,

Establish uniform safe standards,

Encourage industry wide observation of such standards,

Encourage the enactment and enforcement of appropriate laws for the protection and regulation of the business of commercial diving,

To do any such other things as considered by the membership or management committee of ADC to be in their interest or that of this industry sector.

#### Disclaimer:

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The information included in this document is provided for guidance purposes only and seeks to promote industry best practice.

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#### 1. Introduction:

The following document is intended to summarise important elements that may be helpful to persons involved with hiring, Organising or controlling diving operations Conducted by Specialist Diving Contractors.

Diving is a potentially hazardous activity in any environment.

Not withstanding the above statement, when good levels of planning and preparation are applied and strict controls implemented, to supplement the information and procedures set out at the planning stage, the risks can be mitigated and the majority of underwater activity can be completed safely, successfully and economically.

## The Legal Position – Diving at Work Regulations 1997

**The Diving at Work Regulations 1997** (DWR) came into force in 1998 and is supported by five Approved Codes of Practice (2014 ACoP's) covering:

- Commercial Diving Projects Offshore.
- Commercial Diving Projects Inland/Inshore.
- Scientific and Archaeological Diving Projects.
- Media Diving Projects.
- Recreational Diving Projects.

Each of which gives advice on meeting the requirement's of the 'Diving at Work Regulations 1997' (referred to as the Diving Regulations) for the appropriate diving project.

The ACoP for Inland/Inshore Diving Operation's applies when the activity occurs:

- a) Inshore within United Kingdom territorial waters adjacent to Great Britain (generally 12 nautical miles from the low water mark).
- Inland in Great Britain including Docks, harbours, rivers, culverts, canals, lakes, ponds and reservoirs.

For the purposes of this document all references will be based on the assumption that the works fall under the category of the Inland/Inshore ACOP.

#### 3. The Regulations:

Regulation 4 states that:

"Every person who to any extent is responsible for, has control over or is engaged in a diving project or whose acts and omissions could adversely affect the health and safety of persons engaged in a such a project, shall take such measures as is reasonable for a person in his position to take to ensure that these regulations are complied with."

In a coastal or marine construction environment, this could include the employer, a port or harbour master, vessel master, main contractor, designer, specialist service supplier or any operator instructed to use plant or equipment in support of the diving or associated operation.

Whilst the level of responsibility will vary from person to person, all should retain an interest in the diving operation and will need to maintain an element of liaison with the chosen diving Contractor and their appointed personnel.

#### 4. Insurances:

The provision of an in date Employers Liability Compulsory Insurance (ELCI) certificate, specifically including clear reference to the coverage of diving operations is a mandatory requirement.

Sight of a valid certificate should be expected at both the pricing stage and immediately prior to commencement of work on site. Where the chosen diving contractor fails to provide a valid insurance cover and a claim results, the employer, the individual or client commissioning the works is likely to find they and their insurers are liable for the deficiency.

#### 5. Responsibilities:

The employer who requests the work must ensure:

- (1) The appointed contractor is competent to carry out the proposed work.
- (2) The proposed work site is safe and any known hazards, underwater restrictions or associated operational information is made known to the diving contractor.
- (3) That other appropriate facilities or persons will be made available to the appointed diving supervisor should an emergency situation necessitate.
- (4) That welfare is considered.

**The competent diving contractor** carrying out the works must ensure that:

- (1) A detailed diving project plan is prepared and all risks fully assessed.
- (2) Details of the plan are made known to anyone directly or indirectly involved in the diving operation or its support activities.
- (3) That a suitable number of personnel, diving and essential support are available. That sufficient plant and equipment is maintained and available and adequate arrangements for first aid or emergency medical support are in place.
- (4) That the immediate area of the dive site is safe to conduct diving operations and adequate arrangements for the access and recovery of the

diver, even in an emergency are in place.

- (5) That the supervisor or supervisors are appointed in writing and details of the appointment are available on site for inspection.
- (6) That accurate records are, maintained and all other appropriate regulations are adhered too.
- (7) That appropriate welfare arrangements are in place.

**The appointed diving supervisor** in addition to being confirmed in writing by the contractor and properly qualified to carry out the task must ensure that:

- (1) Everyone involved in or required to support the diving operation are fully briefed and aware of the diving plan and any emergency arrangements that are applicable.
- (2) That all information i.e. local conditions, weather, tide, current or similar used in assessing the risks on the site remain valid during the period of the dive.
- (3) That adequate records are kept and persons involved in the support of or working close to the dive site are fully appraised of progress as the operation progresses.
- (4) That the stand-by diver is available at an immediate state with only a hat to fit before being able to enter the water.

#### 6. Team Size:

The correct selection of the number of personnel in a diving team necessary to complete a specified task goes some way to ensuring the safe conclusion of any diving operation.

Regulation 6 and the ACOP indicate that the

MINIMUM team size when conducting surface supplied diving should be FIVE, Supervisor, diver, stand-by diver and two divers / tenders.

The Diving Project Plan in addition to detailing the scope of the task and associated risks, should address the requirement for diving team numbers and confirm when additional team members may be necessary to safely complete a particular task.

The use of Scuba may be acceptable for basic underwater tasks such as inspection and survey only in controlled circumstances where there is no risk of entrapment and the management of an emergency has been considered. The minimum team size normally required to conduct a SCUBA dive safely within the scope of the ACOP is a four man diving team, however, as both the complexity in terms of tools, equipment use and depth of the dive increase so too is the likely need for additional members of the dive team.

#### 7. Equipment:

All commercial diving work should be carried out using equipment that is routinely maintained and certificated as part of a planned maintenance system and suitable for the work in hand.

Whilst DWR 1997 does not specifically exclude the use of Self Contained Underwater Breathing Apparatus (SCUBA), the need to provide communications between the diver and the surface as well as the requirements for an independent air supply reserve, tend to reduce the scope for use of SCUBA and actively encourages the diving contractor to adopt a Surface Supplied Diving Equipment (SSDE) spread.

In addition to the benefits of having a larger reserve of air provided from the surface, SSDE provides the working diver with modern lightweight air helmets that can afford a high degree of head protection whilst working in the water.

The proposed use of SCUBA equipment in most commercial diving environments, other than in benign conditions such as swimming pools or tanks should be very carefully monitored.

Where a contractor proposes the use of SCUBA as their intended primary equipment, an employer should seek guidance from an independent specialist before sanctioning the diving operation.

'SCUBA should never be used for construction or work tasks underwater".

#### 8. Diving Project Plan: (DPP)

Consistent with other Health &Safety legislation the Diving Project Plan (DPP) is intended to "... so far as reasonably practical," identify the hazards and risks existing on or at a dive site and detail how these will be controlled.

In addition the DPP will look specifically at the range of support equipment that will be necessary to cover all foreseeable eventualities on the dive site.

The DPP should make clear reference to the working methods that will be used and detail the control measures that will be implemented for dealing with water flows, underwater currents, low visibility, weather conditions, vessel movements, use of tools as well as specifying any special precautions that may be required to ensure liaison between the dive team and other vessels operating in the area.

In particular, the need to address the method of recovering the diver after completing the work or in an emergency situation when they may be unconscious.

Entry tends to be quite simple but having completed an element of work, the ability to climb a vertical ladder may be seriously impaired and some other form of controlled recovery may be necessary.

The DPP will be used to brief the divers and any other persons involved in the diving operation and a copy of the plan should be made available to any other interested party.

Checklists are commonly used as part of a DPP to ensure all aspects of the duties of the employer; contractor, diving supervisor and divers have not been omitted. A sample checklist has been appended to this document, for use by employers checking that all aspects of the planning have been completed.

#### 9. Emergency Arrangements:

As with all Project Planning regimes, ensuring arrangements exist to deal with all foreseeable emergency occurrences is important.

In addition to the need to provide a safe work environment, provide adequate launch and recovery facilities. The diving contractor must ensure that adequate arrangements exist for the emergency recompression of divers.

Where no in water decompression is planned and the water depth does not exceed 10m, arrangements to have a suitable recompression facility accessible within a maximum travelling time of 6 hours exists.

Where diving is planned to require more than 20 minutes in water decompression or either of the two requirements outlined above cannot be complied with, a suitable recompression facility will be required on the site.

For dive operations between 10 and 50m, where no in water decompression is planned, the Dive Plan should set out the arrangements that are in place to provide access to a suitable emergency recompression facility. Particular reference should be made to having direct phone contact with a specialist diving Doctor able to advise the most appropriate treatment regime.

It is worth stressing that for most shore based

diving operations the DPP and risk assessment is likely to require access to a chamber within a maximum 6 hours travelling.

For most coastal or near shore diving operations, the DPP is likely to set out the need for a recompression facility on site, since the sea and weather conditions can change at very short notice which in turn is likely to compromise the ability of the contractor to achieve access to a shore based chamber facility within an acceptable time.

#### 10. In Conclusion:

diving operations conducted:

The Association of Diving Contractors Represents: Diving contractors who are based and work in the UK or Ireland and who are involved in commercial

- (a) In docks, harbours, rivers, culverts, canals, reservoirs, lakes, ponds, mainly in support of civil engineering projects, but also including ship surveys and maintenance.
- (b) Inshore in respect of salvage and other (mainly civil engineering related) operations.
- (c) Inshore in respect of fish farming activities so long as the diving contractor conducts its diving operations in accordance with safety standards and similar procedures to those used by Members in civil engineering projects.
- (d) Firms of engineering consultants who are registered as diving contractors.
- (e) Companies or organisations that supply support services to the industry including manufacturers of equipment and training establishments.
- (f) Client organisations that may not themselves be eligible to become an ADC Member or Associate Member but who wish to be kept appraised of safety and technical information.

#### Hiring of Diving Contractors – A basic reference Checklist. **Project Name:** Ref No: Checked No: Description ( ) **Tender / Enquiry Stage:** 1 Detailed enquiry issued. 1.1 All available site information proposed. 1.2 Compliant response / quotation received. 1.3 Proof of valid ELCI insurance provided. 1.4 Method statement supplied as appropriate to task. 1.5 Access, Egress and Emergency arrangements are adequate. 1.6 Safety management arrangements adequately explained. 1.7 Team size and equipment choice explained and adequate. 1.8 Any special client / site requirements considered including welfare arrangements 1.9 Checked No: Description ( ) **Prior to Commencement of Diving Work on Site:** Diving Plan Provided. 2.1 Method Statements, Risk Assessments issued are adequate for proposed work 2.2 activity. Tide, Weather and Shipping activity known / considered. 2.3 Access and Egress arrangements established and suitable for work site 2.4 conditions. (Primary and Secondary) All foreseeable hazards considered / controls implemented. 2.5 Copies of the in date ELCI certificate available. 2.6 Supervisor (s) are appointed in writing by the Contractor. 2.7 Diving Operation Records are available on site. 2.8 Divers Medicals and certification checked. (By Contractor). 2.9 Permit to work required. Issue and check conditions. 2.10 Permit to work – Activated? 2.11 Equipment records, test and air purity certificates available. 2.12 Dive team and all support crew given a briefing. 2.13 Any **new** site information made known to Supervisor. 2.14 Proof of H&S Training / Paramedic / First Aid Certs seen. 2.15 Prepared by: Date:



### **The Association of Diving Contractors**

Working to Promote Safer Commercial Diving

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