

Statement of Minimum Commercial Diving Standards for DML Group Companies

FOR EXTERNAL USE

Revision Date	Description of Revision	Approved by	Authorised by
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Diving contractors should note that this document is subject to change from time to time and that they are responsible for ensuring they have a current copy and are compliant with its requirements. Obtain a copy by writing to Head of Harbours, CalMac Ferries Limited, Ferry Terminal, Gourock, PA19 1QP or from any manned harbour operated by the company.

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1. List of Acronyms and Terms used

ACOP	Approved Code of Practice – specifically the Commercial diving projects inland/inshore, Diving at work regulations 1997 Approved Code of Practice and guidance and/or any other relevant ACOP for the diving service supplied
ADC	Association of Diving Contractors (there are both UK and International bodies)
AMED	Approved Medical Examiner of Divers, a medical professional deemed competent to examine the medical fitness of divers to undertake their work
Authorising Person	The individual responsible for issuing a Permit to Dive, as defined in this document
CDM	Construction Design and Management Regulations
CFL	CalMac Ferries Limited
Client	The person requesting the diving work
CMAL	Caledonian Maritime Assets Limited, the Statutory Harbour Authority at, and owner of, the majority of harbours operated by the company
Commercial diving	Diving services that are paid-for with money, favour or reward, including use of diving equipment or even free air. All diving operations conducted in company-operated harbours will be conducted as commercial diving
Company	David MacBrayne Limited and all subsidiary companies and joint ventures
CoSHH	Control of Substances Hazardous to Health Regulations
Diver	A person at work that enters water
Dive Permit	Document confirming permission to undertake a dive project within a defined and agreed timeframe, subject to satisfactory completion of the necessary steps and management of the project as defined in the company process
Diving contractor	A person or organisation responsible for the safe conduct and delivery of the diving services
Diving operation	Any work activity involving a diver, and which is organised to as to be able to be supervised safely by one person; a diving operation may consist of one or more entries to the water by a diver(s)
Diving project	The overall diving job; any activity comprising one or more diving operations, in which at least one person takes part, or will take part, as a diver. A diving project commences when the diver prepares to dive and extends until the last diver has left the water and completed any required recompression. A diving project may consist of one or more diving operations and may last two hours or two months
Diving supervisor	The individual appointed in writing by the Diving Contractor to supervise one or more diving operations
DML	David MacBrayne Limited, and for the purposes of this document, all subsidiary companies in the David MacBrayne Group, including CalMac Ferries Limited
DPP	Diving Project Plan, a document supplied by the Diving Contractor in advance of every diving project and including his risk assessment for the project, his method statement and setting out who is the Diving Supervisor for each diving operation
DWR	Diving at Work Regulations and any subsequent amendments

Emergency Dive	An Emergency Dive, for the purposes of this document, is one where an immediate diving operation response is required and the normally required four working day prior submission of the DPP cannot be observed. The carrying out of any dive operation under these circumstances shall not otherwise compromise or otherwise prejudice the requirements of these Minimum Dive Standards
Harbour Authority	The organisation with the authority to issue permission to dive within the harbour areas for which it is responsible. This power may be delegated to a harbour operator (such as the company)
HSE	Health and Safety Executive
IMCA	International Marine Contractors' Association
Inland/inshore diving	Diving activity conducted inshore within the United Kingdom territorial waters adjacent to Great Britain (12 nautical miles from the low water mark) or inland in Great Britain including docks and harbours
LOLER	Lifting Operations and Lifting Equipment Regulations and BS7121
MCA	Maritime and Coastguard Agency
MGN	Marine Guidance Note
NHS	National Health Service
NTM	Notice to Mariners
PKC	Perth and Kinross Council, the Statutory Harbour Authority at, and owner of, Perth Harbour
PMSC	Port Marine Safety Code
PPE	Personal Protective Equipment (PPE) At Work Regulations
PUWER	Provision and Use of Work Equipment Regulations
SHA	Statutory Harbour Authority – A Harbour Authority with statutory powers and duties in relation to shipping and safety of navigation; OR Statutory Harbour Area – The area of water under the authority of a Statutory Harbour Authority
Vessel Certificate	Document confirming that all isolations necessary to protect a diver(s) servicing a vessel are in place and other hazards identified and agreed, as issued by the skipper or Master of such a vessel. The requirement for a vessel certificate for the Dive Contractors' own vessel rests with the Diving Supervisor following an assessment as part of their Dive Project Plan

2. Introduction

David MacBrayne Ltd as well as its subsidiary companies (including CalMac Ferries Limited, Limited and Caledonian MacBrayne Crewing (Guernsey) Limited – referred to as ‘the company’) recognises its responsibility and legal duty under the Diving at Work Regulations (DWR) to take reasonable measures to ensure the health and safety of persons engaged in commercial diving operations that it commissions, and that are conducted in its harbours.

The company, CMAL, other facility owners/SHAs and other harbour users contract diving services to facilitate the operation of transport services and to carry out inspection, repair and maintenance work on company-operated vessels, third party vessels and harbour infrastructure.

This document sets out the mandatory minimum standards for such diving projects and describes the standards with which all Commercial Diving Contractors engaged by the company or contracted by others for dives undertaken within the authority of the company must comply, for inshore/inland commercial diving projects. All the requirements in this document are mandatory unless specifically noted otherwise.

The minimum standards contained herein are supplied to assist Diving Contractors to compile the documentary record of the outcomes of planning carried out in accordance with the Diving at Work Regulations 1997 and the applicable Approved Code of Practice (ACOP).

Of particular relevance is Regulation 4 of the DWR which 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 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.

The company does not allow any unauthorised diving on its vessels or within its operated harbours. Authorisation must be sought and obtained before any diving is undertaken.

2.1 Principles

Where commercial diving projects are undertaken for the purposes of servicing any company-operated vessel, or any vessel leased to the company, the company is usually the client of the diving project.

Where the company organises such harbour activities as ground mooring or berth inspections by a dive team, the company is usually the client of the diving project.

For commercial diving in any company-operated harbour, the permission of the harbour operator is required. This permission is granted by means of a dive permit which forms part of the company’s safe systems of work.

The company may not always be the client of such a diving project, for instance if the project is being conducted to free a propeller on a fishing vessel or leisure craft but has other responsibilities if the company is the harbour operator.

Unauthorised diving for shellfish or leisure purposes is not permitted in company-operated harbours. Authorisation must be sought and obtained before any diving is undertaken.

For commercial diving in any harbour that is not operated by the company, the permission of the controlling harbour authority is required, unless by exception as per Section 3.5 of this document. This permission is usually granted by means of a dive permit.

Sections 3.5 & 3.6 of this document identify the process for obtaining a Permit to Dive, the role of the Authorising Person and the exceptional circumstances where special arrangement may be permitted.

In all cases, no dive operations will be permitted without the issue of a Permit to Dive issued either by the 3rd Party Harbour Authority or through full compliance with the requirements of the company process.

Non-commercial diving shall not be undertaken on company-operated or leased vessels.

The standards set out in this document are applicable to,

- All diving requested to take place on company-operated vessels, including leased vessels, at any location and
- All diving in company-operated harbours

The company has adopted the following minimum requirements,

1. A minimum five-person diving team is required, as noted in the ACOP for inland/inshore diving and
2. Only surface supplied diving equipment will be accepted as being the appropriate equipment to be used in all commercial dive projects within the limits of the authority of the company

Failure to comply with these requirements will lead to a contractor's removal from site and may prevent future work being awarded to that contractor. In addition, in company-operated harbours, failure to comply with these requirements may result in a diving contractor being reported to the HSE.

2.2 Legislative Requirements

All commercial diving operations undertaken for the company and/or within company-operated harbours must comply with the following legislation. This list is not exhaustive, and Diving Contractors must satisfy themselves that their work complies with all relevant legislation and guidance,

- The Health and Safety at Work Act and associated legislation including, but not limited to,
- Diving at Work Regulations (DWR) and the appropriate ACOP(s)
- First Aid at Work Regulations
- Lifting Operations and Lifting Equipment Regulations (LOLER)
- Provision and Use of Work Equipment Regulations (PUWER)
- Personal Protective Equipment (PPE) At Work Regulations
- Control of Substances Hazardous to Health (COSHH) Regulations
- Construction Design and Management (CDM) Regulations

Diving contractors must ensure they study and comply with guidance contained in Diving Information Sheets (DVIS) issued from time to time by the HSE, good practice guidelines and safety alerts as issued by the International Marine Contractors' Association (IMCA), the Association of Diving Contractors (ADC) UK and the Association of Diving Contractors International as well as Marine Guidance Notes (MGN) pertaining to the use of workboats etc. issued by the Maritime and Coastguard Agency (MCA).

The company prefers Diving Contractors undertaking work on its behalf to pursue qualification of Diving Supervisors under the ADC UK scheme, although this is not currently a mandatory requirement.

All work activity diving projects within company-operated harbours will be undertaken as commercial operations, conducted in full compliance with the requirements of the DWR and the ACOP for Commercial Diving Projects Inland/Inshore as well as any relevant notices to mariners in force.

3. Diving Projects

3.1 The Diving Contractor

For all diving projects commissioned by the company, or performed in a company-operated harbour, the contractor will be the named Diving Contractor, irrespective of what other parties are involved in the activity.

This requirement is key to ensure compliance with the DWR which specify that there must be “one person and one person only who is the Diving Contractor for that project”. The Diving Contractor therefore cannot be two or more parties.

The Diving Contractor may engage bona fide subcontractors (i.e. those contracted to undertake specific activities) or labour-only subcontractors (i.e. those treated as employees and working under the direction of the Diving Contractor and not generally providing their own tools and materials, excepting small items) as required but is responsible for ensuring the compliance of all such parties with these minimum standards.

The Diving Contractor shall ensure that best industry practice is understood, incorporated in its safe systems of work and briefed to all personnel that may attend either a company vessel or a company-operated harbour in a working capacity.

3.2 The Diving Project Plan (DPP)

All diving projects require a DPP which must include risk assessments covering work, method and site-specific hazards as well as a method statement describing the approach and the diving techniques to be employed. An emergency plan shall also be included within the DPP (more information is supplied in section 4).

The diver's breathing equipment must supply him with a suitable gas, at a suitable rate of flow, at a suitable temperature in all foreseeable conditions, including emergencies.

The DPP must, as a minimum,

- Clearly identify one party (person or organisation) that is the Diving Contractor; where two or more parties are involved, they must agree which is the Diving contractor and record the relevant party's name in the DPP and on the dive permit paperwork
- Relate to the specific location and work planned i.e. generic risk assessments are not acceptable
- Specify full details of the location. These will include,
 - Full postal address and telephone number
 - For company-operated harbours – Name of the company's Authorising Person and contact telephone numbers
 - For non-company-operated harbours – Name of the harbour master or harbour authority's representative and contact telephone number. In cases where the company's process and forms are to be used, this may include the Name of the company's Authorising Person and contact telephone numbers

- Assess the full range of risks/hazards relevant to the diving project. These may be identified from sources including the Diving Contractor's inspection and assessment of the site, his knowledge and experience of the work to be undertaken, the master or skipper of a vessel, harbour drawings, hazards provided by the Client, etc. It is the responsibility of the Diving Contractor to ensure that the range of risks/hazards assessed is suitable and sufficient and relates to the specific diving project
- Specify the controls to be applied, including special precautions to ensure liaison between the diving team and any vessels operating in the area
- Detail the contractor's working method for the work including his arrangements for
 - Emergency rescue and recovery of a stricken or troubled diver (including workable arrangements for lifting an unconscious diver from the water – ladders are not generally considered suitable)
 - Contingency plans
 - Other foreseeable events, including emergencies
 - The tools and equipment to be used (note that if the dive involves hot work, an additional permit to work is required to cover that activity and its risks)
- Define each diving operation to be undertaken under the scope of the diving project
- Specify the timing of the diving project
- Specify the Diving Supervisor(s) who will oversee each diving operation under the diving project
- Demonstrate the competence and qualifications of diving team members to participate in the planned work (the Diving Supervisor is responsible for ensuring the competence of all diving team members but may be requested to provide documentary evidence of certification)
- Demonstrate that personnel who are not employed by the Diving Contractor but who are considered for inclusion in the diving team are competent for the work that they are going to do, are familiar with the Diving Contractor's procedures, rules and the diving plant that is to be used (the Diving Supervisor is responsible for ensuring the competence of all diving team members but may be requested to provide documentary evidence of certification)
- Specify arrangements for the involvement of personnel who are not employed by the Diving Contractor, together with details of their responsibilities and reporting line
- Specify the range of support equipment that will be necessary to cover all foreseeable eventualities at the dive site
- Specify arrangements for dealing with an emergency (the emergency plan – see section 4 for further information)

The control measures for all diving operation risks will be assessed and reduced/mitigated during an initial site visit and/or as part of the risk assessment within the DPP.

Where a DPP consists of other documentation, the Dive Contractor shall confirm the purpose of such documents and who is responsible for the different elements contained within these, so as to ensure that the CFL Authorising Person is fully aware of the documentation and content prior to issuing any Permit to Dive.

The DPP should be supplied to the Authorising Person for review as soon as possible and no less than four working days in advance of a planned dive. In the event of an Emergency Dive, the requirement for this four working day notification will be relaxed, provided that this shall not compromise or otherwise prejudice the requirements of these Minimum Dive Standards. Where

requested, the DPP will also be shared with the harbour authority either for prior review for permission to dive or as post-dive project information if insufficient time for the authority's review is available.

Where a DPP is reviewed and amended on site during review between the Diving Supervisor and the company Authorising Person and requires amendment, hand-written notes will be acceptable as a record of revision on the condition that such notes are agreed, legible and are countersigned by both parties.

A dynamic on-site risk assessment must be carried out by the Diving Supervisor before the dive operation commences and the DPP updated accordingly and supplied to the Authorising Person for review.

Copies of the DPP must be retained as a live document during diving operations by the Diving Contractor and available for inspection.

3.3 Vessel Certificate

Responsibility for whether a shore asset is safe to dive on rests with the asset owner, statutory harbour authority or harbour operator.

Vessels must be deemed safe to dive on by the issue of a Vessel Certificate by the Skipper, Master or other person in charge of the vessel at the time. A Vessel Certificate is required for all diving for the purposes of surveying or otherwise servicing a vessel.

The requirement for a vessel certificate for the Dive Contractors' own vessel rests with the Diving Contractor following an assessment as part of their Dive Project Plan.

It is the responsibility of the Diving Contractor to confirm that all necessary isolations and safety precautions are in place, and that appropriate isolation methods have been used, including disconnection from power sources rather than simply tagging control points wherever practicable.

For diving in company-operated harbours and for diving on company-operated vessels at any location, the company's standard Vessel Certificate (Form 2.162) shall be used.

3.4 Diving Team

3.4.1 Team Size

There must always be sufficient personnel to allow the diving operation to be conducted safely and effectively. For diving to company-operated vessels and/or in company-operated harbours, a minimum five-person diving team is required, as noted in the ACOP for inland/inshore diving.

The diving team must include as a minimum,

1. Diving supervisor
2. Diver
3. Diver's attendant
4. Standby diver
5. Standby diver's attendant

The DPP must justify the team size necessary for the task. It is expected team size may increase as the complexity and/or depth of the dive increases.

3.4.2 Team Duties

Diving team members must be qualified and competent to perform the tasks assigned to them.

Team members may carry out more than one duty, provided that they are competent to do so and that their different duties do not interfere with each other. Duties and responsibilities must be clearly defined in the DPP to avoid confusion.

3.4.3 Medical Fitness to Dive

The diver(s) and standby diver(s) must all be medically fit to dive and this must be able to be evidenced to the Authorising Person through provision of an MA2 certificate issued by an HSE Approved Medical Examiner of Divers (AMED). Copies of all relevant certification must be held by the Diving Contractor and available for inspection.

3.4.4 Team Members Qualifications and Training

Every member of any diving team supplied to the company to deliver diving services or to dive in a company-operated harbour must be suitably qualified and in possession of a current qualification relevant to their role on the diving team.

Each member of the contractor's diving team must have a current training certificate available evidencing the training they have received for the role they intend to fulfil on the dive team; certificates must be available for inspection at the dive site if required.

For divers and the Diving Supervisor, the training must be of a type approved by the HSE and listed on the HSE web site. A basic level of diving competence may be assumed from a diver who has one or more of the approved diving qualifications. The list of approved diving qualifications is published at <http://www.hse.gov.uk/diving/qualifications>.

The Diving Supervisor must be qualified to perform the work being supervised.

Where dive tenders do not hold a formal HSE recognised diving qualification they must be able to demonstrate that they have undergone a suitable training programme from a reputable third-party provider, such as a commercial diver training school, to act in this role.

3.4.5 First Aid

The contractor must ensure that a suitable number of diving team members, based on risk assessment and not including the diver(s), are qualified first aiders. Evidence of qualification must be brought to the dive site in the form of a First Aid at Work certificate with Oxygen Provider's Supplement.

At least two first aiders should be nominated by the diving contractor for the duration of the project and all members of the dive team should be aware whom nominated persons are.

3.4.6 Association of Diving Contractors (ADC) Membership

The contractor's full membership of the Association of Diving Contractors (ADC) is preferred. Further details about ADC membership can be obtained from www.adc-uk.info/website/home. Copies of all relevant certification must be held by the Diving Contractor and available for inspection.

3.4.7 Diving Supervisor

The Diving Supervisor must always be appointed in writing by the Diving Contractor and a copy of the appointment documentation must be available at the dive site and may be checked before diving is permitted. It is preferable, although at this time not mandatory, that ADC qualified Diving Supervisors are used.

3.5 Authority to Commence Works – Dive Permit

Only the Authorising Person as defined in Section 3.6 shall issue a Permit to Dive.

For diving in company-operated harbours, authority to commence work is only granted to the Diving Supervisor once he/she is in possession of a signed Dive Permit (Form 2.163) issued by the Authorising Person.

For diving in other harbours, the harbour authority's permission to dive must be obtained, unless prior approval is granted otherwise or as per the exceptional circumstances outlined below.

A Permit to Dive shall normally be issued by the Authorising Person who is present at the location of the diving operation and is able to satisfactorily assess the relevant hazards and any impact on or by the diving operation. The **Diving Contractor** shall ensure that a Dive Permit is obtained during normal port office hours, or as agreed with the **Authorised Person**, for any planned activities. However, a Permit to Dive may be provided as follows in the following exceptional circumstances which may occur from time to time.

3.51 Exceptional Circumstance 1

Where a 3rd Party Harbour Authority cannot be contacted or is unable/unwilling to issue a Permit to Dive and where all reasonable efforts by the company have been exhausted.

Requirement: Company staff will adopt use of the company process for issuing a Permit to Dive. This possibility only applies where the following can be guaranteed,

- No objection or refusal has been received from the 3rd Party Harbour Authority;
- Express approval has been sought and received from a CFL Regional Harbour Manager or the CFL Head of Harbours;
- The requirements of the company process can be complied with.

3.52 Exceptional Circumstance 2

The Authorising Person is unable to attend/travel to the dive project location owing to unavailability of or inaccessibility to connecting transport or other logistics.

Requirement: In cases such as this, where there is a genuine reason for the Authorising Person being unable to attend the dive project location, the Permit to Dive may be issued remotely. This possibility only applies where the following can be guaranteed:

- Express approval has been sought and received from a CFL Regional Harbour Manager or the CFL Head of Harbours;
- Facilities exist (including e-mail, mobile telecommunications, fax and/or printing facilities, etc) to allow the sharing and review of all relevant dive project information by all relevant parties;
- Facilities exist (as above) to allow completion and signing of the relevant documents by both Dive Supervisor and Authorising Person – Note: digital signing or otherwise acceptance of documentation will be accepted where print/scan facilities are not available, subject to agreement of this approach.

That the dive supervisor provides information and communicates with the Authorising Person or nominated staff immediately before the start of the dive project:

- Communication methods and arrangements between the Dive Supervisor, Authorising Person and other relevant company staff are established to allow the Authorising Person to be aware of the dive project commencement, duration and completion;
- If for any reason any of the above cannot be guaranteed, a Permit to Dive will not be granted until these requirements can be met, or the Authorising Person can attend the dive project location in person.

3.6 Authorising Person

The Authorising Person shall be defined as either,

1. A company employee holding a Managerial or Supervisory role within Ports or Harbours (including Perth Harbour Master and Oban Piermasters) who supplies permission to dive in a company-operated harbour, or may have cause to supply permission to dive at a 3rd Party Port;
2. A representative from a 3rd Party Harbour Authority where that authority's Permit to Dive system is being adopted;
3. Any other company employee which, owing to exceptional circumstances and only by express approval of either a CFL Regional Harbour Manager or CFL Head of Harbours, is required to act in the capacity.

Only the Authorising Person, as defined, shall issue a Permit to Dive and this person shall be considered competent to issue a Permit to Dive, or shall (in exceptional circumstances) be assisted by a competent person to provide the role.

In the case of a 3rd Party Harbour Authority, it will be for that authority to define its own requirements for competency and appointment for the position of Authorising Person (or whichever definition that authority chooses to use for its own purposes) within the terms of that authority's own safety management system.

Where a company employee is acting in the capacity of Authorising Person the competency requirements of such an individual shall be as follows,

1. The employee shall attend or be working towards completion of the Diving Project Awareness training course to the extent as defined within the CFL Port & Harbour Training Matrix
2. The employee shall have reviewed and understood the content and requirements of the company process for controlling and permitting all relevant commercial diving operations
3. The employee shall hold a Managerial or Supervisory role within the company

Where there exists any ambiguity about the competency of an individual to act as Authorising Person, advice, guidance and, where necessary, approval should be sought from a CFL Regional Harbour Manager or CFL Head of Harbours.

3.7 Audits and Inspection

The company will be entitled to audit and inspect any diving project and the offices, workshops and premises of Diving Contractors at any time. Such audits and inspections are likely to examine the Diving Contractor's planned maintenance system, stowage arrangements, technical workshops, diver familiarisation and training arrangements, safety management systems and procedures for assembling diving project plans and briefing diving teams.

When the Diving Contractor attends a company-operated harbour, the Authorising Person may choose to request documentary evidence of materials that the company's minimum standards make

clear must be brought to the dive site such as medical fitness to dive certificates, first aid certificates, evidence of the Diving Supervisor's appointment by the Diving Contractor etc.

The company may also elect to inspect, or to appoint an inspector to inspect equipment at any diving project at a company-operated harbour or where the company is the client of the diving service.

Where the location is within the jurisdiction of a SHA or other facility owner a representative of that organisation will be entitled to audit and inspect any diving project.

It is further expected that, where a Diving Contractor employs the services of any bona fide subcontractor, that subcontractor will be subject to a reasonable and similar audit and inspection process. Auditing and inspection of subcontractors will be carried out by the Diving Contractor as main contractor and employer. This will ensure a standard and consistent approach involving all parties.

3.8 Insurance

3.8.1 Employers Liability Insurance

The Diving Contractor must be in possession of suitable Employer Liability Compulsory Insurance (ELCI) with a minimum £5m cover and £10m cover preferred. For some diving projects, £10m cover may be demanded as a condition of contract, particularly if larger diving teams are involved. The company may request to examine a certificate of insurance which must be brought to the dive site, be in-date and must make clear reference to the provision of cover for commercial diving operations.

This insurance must cover the Diving Contractor's employees and any labour-only subcontractors engaged to deliver the diving service.

For bona fide subcontractors, each such subcontractor must have its own insurance of an equivalent value to that specified above.

Insurance certificates must be free from any exclusions that preclude personnel from undertaking any relevant work (e.g. diving).

Copies of all relevant ELCI certification must be held by the Diving Contractor and available for inspection.

3.8.2 Public Liability Insurance

The Diving Contractor must also hold Public Liability Insurance (PLI) to a minimum £10m cover.

Again, this insurance must cover the Diving Contractor's employees and any labour-only subcontractors engaged to deliver the diving service.

For bona fide subcontractors formally contracted to work for the Diving Contractor, each such subcontractor must have its own insurance of an equivalent value to that specified above.

Copies of all relevant PLI certification must be held by the Diving Contractor and available for inspection.

3.9 DML Life Saving Rules

The company uses a set of nine simple Life Saving Rules to reinforce key safety principles. Compliance with these rules is mandatory for Diving Contractors performing work for the company, or within company-operated harbours. The Life Saving Rules are set out briefly below and further information can be found on the CalMac website at www.calmac.co.uk/contractors.

Rule 1: PPE – wear the appropriate PPE for the job

Rule 2: Control of work – control hazardous activities through risk assessment

Rule 3: Confined spaces – obtain authorisation before entering a confined space

Rule 4: Working at height – protect against falls when working at height

Rule 5: Safe position – occupy a safe position when working

Rule 6: Isolations – verify isolations before work starts

Rule 7: Tools & manual handling – minimise manual handling and use the right tool

Rule 8: Driving – ensure driver, vehicle and journey are safe

Rule 9: Alcohol & drugs – never mix alcohol or drugs with work or driving

3.10 Record Keeping

The Diving Contractor must ensure that members of the diving team maintain dive log books and other legally-required records of diving work.

For diving in company-operated harbours, or for diving on company-operated vessels, the company will retain dive permit paperwork in line with normal filing protocols. At company-operated harbours or any other situation where there has been cause for the CFL Authorising Person to issue the Dive Permit, the Authorising Person will retain a copy of dive permit paperwork, including all supporting document, for a period of no less than 3 years. For diving on company-operated vessels, the Skipper, Master or other person in charge of the vessel at the time shall retain a copy of any completed Dive Permit and any associated Vessel Certificate as per the Vessel Standard Filing System, Section H7-2.

3.11 Equipment, Plant and Materials

The Diving Contractor shall maintain equipment using a planned maintenance system and shall ensure that all required testing, certification and inspection of equipment is undertaken in line with statutory requirements and industry best practice.

All equipment to be used on site will receive a visual check by the Diving Contractor for fitness for purpose and will be in-date with regards to the appropriate legislative and inspection regimes applicable to that item of equipment. Copies of all relevant certification must be held by the Diving Contractor and available for inspection.

It is expected that the following items of plant and equipment will be utilised,

- Surface Supply Diving Equipment, consisting of surface supply diving helmets, umbilical, dive panel, HP/LP air supply, diver harness/integrated weight jacket. All equipment used will be certified and carry certificates of conformity, which will be available for inspection on site
- All equipment (PPE, tools and other) is to be maintained, inspected and used in an appropriate manner and following manufacturer's instructions and/or training

- First Aid and emergency oxygen quantities appropriate to diving activities and location
- Footwear, appropriate for the environment and operations
- Gloves appropriate for the environment and operations
- Work clothing appropriate for the environment and operations
- Life-saving equipment including personal issue life jackets
- Electrical and power tools/equipment shall be tested to meet national or international standards and a copy of this certification shall be held
- Safety helmets will be used by all Dive Team members not directly involved in diving activities
- Eye protection and hearing protection appropriate for the environment and operations as determined by the on-site dynamic risk assessment will be used
- In shore-based diving projects A-boards or flags will be used to indicate the location, and if possible, the extremities of the dive operation area. Responsibility for determining whether an A-board or flag (or both) is most appropriate rests with the Diving Supervisor to ensure that the markers utilised are fit for purpose and suitable for the conditions at the time of any dive operation
- When diving from a vessel, an A-flag and daymark may be used. The appropriate vessel navigation lights will be displayed in reduced visibility and/or darkness. Again, responsibility for determining whether an A-board or flag (or both) is most appropriate rests with the Diving Supervisor to ensure that the markers utilised are fit for purpose and suitable for the conditions at the time of any dive operation

There must be provision to maintain the diver in safe thermal balance. If dry suits are used, suit inflation must be from the main gas supply, or from a separate bottle, and never from the bailout bottle.

If the diver is not using a helmet and working in the splash zone, or in any other area where he may be subject to significant water movement close to a structure, consideration should be given to head protection.

3.12 Personnel Transfer Operations using Lifting Equipment

Personnel transfer operations using lifting equipment and personnel carriers (man riding baskets) are beneficial in the respect that the diver does not have to climb ladders whilst wearing heavy diving equipment. Diving baskets used for this purpose must meet the following minimum requirements,

- Must have a protective roof
- Must be equipped with a locking gate or safety chain to prevent personnel from falling out
- Must have suitable handholds for the occupant
- Must have an anti-spin system in place, such as a separate manned control line from the corner of the basket to quay
- Must be rated for “man riding” purposes to a minimum of 200kg per diver

The Diving Contractor will be expected to provide clear written risk assessments and procedures which cover all aspects of personnel transfer operations using a diver launch and recovery system.

Risk assessments should cover the full range of hazard types that may be present during a particular transfer and/or recovery operation.

Only approved lifting equipment, which has been marked as suitable for man riding or suitable for personnel transfer should be used.

All lifting equipment, personnel carriers and their attachments must be subject to a pre-use check regime and also to a thorough examination by a competent person at intervals which are specified in the LOLER (or more frequently if specified by the competent person).

Crane operators and banksmen should be trained to assess all hazards associated with the personnel transfer operation, and to implement the lifting plan and the corresponding procedures devised. Persons being transferred should be briefed on the procedure and risks which could be involved during this operation.

If the lifting equipment has been identified as the primary means to recover an incapacitated diver UNDER NO CIRCUMSTANCES can the equipment be used for any other purpose while a diver remains in the water.

3.13 Workboats and Diving Support Vessels

In line with the Port Marine Safety Code (PMSC), any workboat used in a company-operated harbour or as part of a diving project commissioned by the company must be fit for purpose for any use to which it is put. As such, workboats must be properly maintained, equipped and manned by competent personnel.

The Diving Contractor is required to ensure that any diving project involving a workboat is conducted in accordance with Merchant Shipping (Small Workboats and Pilot Boats) Regulations, and the associated Code of Practice for the Safety of Small Workboats and Pilot Boats and the guidance published in MGN 424(M) Safety Responsibilities on board Dive Boats.

The CFL Harbour Operations Manual defines the current system to ensure that periodic checks of all harbour work craft are carried out and where pilotage plans are a requirement. The relevant Authorising Person will provide details to the Diving Contractor to ensure compliance with these requirements.

3.14 HSE Enforcement Notices

The Diving Contractor shall notify the company in writing if it is issued with any enforcement notices, stating its remediation plan and timescales. The Diving Contractor shall also notify the company upon having discharged these agreed actions. The company may elect to visit the Diving Contractor's premises at such a time, to satisfy itself of the proper discharge of actions and may involve a third-party specialist to assure itself of compliance and the continued safe operation of the Diving Contractor.

3.15 Security

The Diving Contractor will ensure all persons participating in the diving project adhere to any safety or security measures prevailing or identified for the site.

3.16 Public Safety

The company is concerned to preserve and enhance its public image and Diving Contractors must operate with respect for the needs and expectations of the travelling public and other harbour users.

The Diving Supervisor will examine the site to assess the extent of public access and risk of the dive operation to the public. All members of the diving team are to be aware of movements of

members of the public and if necessary, in consultation with the company's representative or the harbour authority, an exclusion zone is to be established.

Members of the diving team must not be unduly distracted by the public and should concentrate on the prevailing task.

The Diving Contractor shall supply and erect public safety signage and barriers at the dive site, suitable for both deterring and preventing public encroachment onto the dive site.

3.17 Control of Change

If at any time during the works, it is deemed necessary to deviate from the agreed sequence of works, equipment spread, team composition or method statement then the Diving Supervisor must seek agreement for the change, from the Authorising Person and/or the relevant harbour authority.

It is expected that any such change, in the event of new hazard information, will result in an update to the project risk assessment and change to the DPP, required as part of an agreed change management procedure.

The transfer of responsibilities from one company Authorising Person to another will not be permitted during an operating permit to dive period under normal circumstances. The Authorising Person should ensure that any permit to dive is controlled such that they can be the single Authorising Person during the agreed timescale of the permit to dive.

In exceptional or emergency cases, where the Authorising Person is unable to fulfil the responsibilities for the the diving operation and/or requires to hand over responsibility to another Authorising Person,

- Contact the appropriate Regional Harbour Manager or CFL Head of Harbours and seek approval for an exceptional change
- Provide the Regional Harbour Manager with information and justification for the proposed change and the reason for the exceptional or emergency circumstances
- Obtain and confirm approval from the Regional Harbour Manager
- Instruct the Diving Supervisor of the early termination of the dive operation
- Ensure the dive team are safely removed from the water and sign to confirm that the current permit to dive is closed
- The replacement Authorising Person will then undertake a full review of the dive project and documentation, in conjunction with the previous Authorising Person and the Diving Supervisor, and assure themselves of the safety of the proposed operation
- The Second Authorising Person will issue a new permit

In any case the Authorising Person must stop the current diving operation and close the Dive Permit.

On appointment, the replacement Authorising Person must start the process anew and issue new Dive Permit, reflecting the changes, to enable the diving operations to resume.

4. Site Specific Emergency Plan

4.1 Recompression Chamber

The Diving Contractor's emergency plan must be supplied as part of the DPP and must contain full details of any recompression facility brought to the site, or a facility to which a diving casualty will be transported. These will include,

- Full postal address and telephone number for the harbour operator and/or authority as appropriate, this must include contact information that can be used in the event of an emergency
- Description of the casualty primary evacuation method
- Description of the alternative arrangements if the primary evacuation method becomes unavailable or unsuitable

The Diving Contractor is expected to establish that any chamber is available for use and is not reserved for scheduled treatment. For this reason, NHS recompression facilities should only be nominated when this specific check has been undertaken and the DPP must specify how such checks will be performed and by what means the Diving Supervisor will be informed if the chamber's status changes.

The Diving Contractor must consider the impact that weather may have on casualty evacuation by sea or air that may compromise the contractor's ability to transport the diver for treatment both safely, and within the prescribed evacuation requirements.

The transport of the casualty to a recompression chamber must be achievable within the maximum window specified in the relevant ACOP and is the responsibility of the Diving Contractor. This transport must not depend on any working diver, who may be rendered incapable of driving a vehicle or navigating a vessel by decompression sickness. The evacuation method also must not depend on a scheduled ferry service, where that service vessel is the subject of the specific dive requirement.

4.2 Medical Assistance

The Diving Contractor will ensure adequate arrangements exist for first aid and medical treatment at, or as near as reasonably practicable, to the dive site.

The emergency plan must contain full details of the location of the nearest Accident & Emergency facility to which a casualty will be transported. These will include,

- Full postal address and telephone number
- Description of the casualty's primary evacuation method. Dependent on circumstances the Diving Contractor may not be permitted to assume that a scheduled ferry service is operating

4.3 Briefing

The Diving Supervisor will ensure that the emergency plan and arrangements for dealing with foreseeable emergencies are clearly understood by all those engaged in the diving operation including, where relevant, other parties such as emergency contacts. This would normally be ensured by carrying out a pre-dive briefing session with all those involved.

Written evidence of all briefings shall be retained on site by the Dive Contractor and available for inspection.

5. Dive Site Arrangements

5.1 Site Induction

Where required by the relevant harbour authority and/or operator, the Diving Contractor must arrange to attend the dive site in advance of the work activity (usually immediately prior to it) to undergo site induction.

For diving in company-operated harbours, the performance of a site induction is mandatory. In other harbours, it is the responsibility of the Diving Contractor to ascertain whether its team is required to undergo induction, and to present its team for induction as necessary.

5.2 Notices to Mariners (NTM) and Lookouts

The diving project and operation(s) will not disrupt vessel movements unless previously agreed with the relevant harbour authority or harbour operator's representative.

In most non-urgent cases an NTM will be issued by the relevant harbour authority.

A copy will be issued to and must be in the Diving Supervisor's possession on site throughout the duration of the diving project.

At company operated harbours, a verbal warning must be broadcast by company Port Staff on both VHF Channel 16 and VHF working channel 12 to local harbour users whenever possible.

In the absence of CFL staff on site, the Dive Supervisor will be responsible for ensuring a VHF transmission is made on Channel 16 prior to commencement of, and at completion of the diving operation.

The Diving Contractor shall maintain a lookout for vessel movements throughout each diving operation,

- As determined necessary by the Diving Contractor's risk assessment and
- Where diving is being conducted in navigational channels during periods when the presence of harbour traffic is deemed likely by the Diving Contractor or the harbour operator or authority

Should unrelated vessel traffic present at the dive site the diver(s) must exit the water until such time as the Diving Supervisor is satisfied that traffic presents no risk to any member of his team.

The requirements for ownership, promulgation, review, instigation and timescales relevant to NtMs is defined in the CFL Harbour Operations Manual and more information will be provided by the relevant CFL Port Manager.

5.3 Communications

All communications must be tested prior to commencement of diving operations. The Authorising Person must be informed that diving operations are about to commence, each time operations are suspended and when operations are concluded. Communication methods can include land and mobile phones, e-mail and VHF.

If, in exceptional circumstances, the Authorising Person cannot attend or has cause to be away from the port during diving operations, the Authorising Person must ensure that the process outlined in Section 3.5 of this document is adhered to. Although, by approval, it is not necessary for the Authorising Person to be present at the port during the dive project, the Authorising Person must ensure that all necessary steps have been taken to ensure that the dive project can proceed safely. This will include for aspects such as DPP review, provision of local dive hazards, NtM and/or VHF

notifications, review of any relevant completed Vessel Certificates, issue of a signed permit to dive and establishing all necessary communications.

The appointed Diving Supervisor must be in control of the operation at all times and must be in direct two-way voice contact with the diver. He must be able to monitor the diver's breathing pattern at all times. He must not hand over communication to any other person except another properly appointed and qualified Diving Supervisor.

If possible, the standby diver should listen in to the communications with the diver. The more he knows, the more effectively he can respond in an emergency.

The Diving Supervisor is responsible for ensuring that the Authorising Person is communicated with in terms of commencement and completion of a dive operation and if any emergencies arise.

5.4 Plant and Machinery Movements

The Diving Supervisor will liaise, regarding all plant and machinery movements, with

- For diving in company-operated harbours, the Authorising Person or
- For diving in other harbours, the relevant harbour authority

5.5 Traffic Movements

The Diving Supervisor will liaise, regarding all traffic, vehicle and passenger movements, with,

- For diving in company-operated harbours, the Authorising Person or
- For diving in other harbours, the relevant harbour authority

5.6 Briefing Methodology

All diving team members must be briefed daily, as a minimum, on work activities and will adhere to the Diving Contractor's method statement as set out in the DPP.

All competencies will be briefed and verified before work commences.

5.7 Current, Wave Height and Differential Pressure Hazards

A dynamic on-site risk assessment must be carried out by the Diving Supervisor before the dive operation commences.

Diving works shall not proceed if currents exceed 0.8 knots, wave heights are considered to be too high or dangerous, or in any high-pressure area where differential pressures could exist.

In all cases the Diving Contractor's risk assessment must take account of such hazards and may specify lower limits as appropriate.

5.8 Pre-dive Checks

In addition to items on checklists required by the Diving Contractor, as well as those supplied as part of the Dive Permit form, the Diving Supervisor would be expected to check the following points before diving commences,

1. Are arrangements in place to recover an injured or possibly unconscious diver from the water?
2. Has it been confirmed a recompression chamber is available for the duration of the operation(s)?
3. Has a dive permit (or other documentation) been obtained and in force?
4. Have all relevant people been informed that the dive is to take place?
5. Have all those taking part in the operation(s) been fully briefed on the task, potential hazards and emergency procedures?
6. Have any vessels, valves or other items of equipment whose operation could endanger the diver been made safe and a vessel isolations certificate obtained and in force?
7. Are the minimum amounts of gas and air available at suitable pressures?
8. Are minimum amounts of other consumables available as required?
9. Are the weather conditions suitable and likely to remain so for the duration of the dive?
10. Are the correct signals and flags being displayed to ensure that others know that diving is taking place (Responsibility for determining whether an A-board or flag is most appropriate for visibility purposes rests with the Diving Supervisor)?

5.9 Deployment of Diving Personnel

Dive vehicles should be parked safely, in line with the harbour authority or operator's directions and as close as possible to the work area to minimise lifting of dive equipment.

All diving team members are required to wear relevant PPE including gloves and lifejackets before commencing equipment mobilisation. The dive equipment will be sited in line with the layout decided by the Diving Supervisor in consultation with the harbour authority, or the harbour operator.

The Diving Supervisor will normally conduct a visual, fit for purpose test on all equipment before use.

5.10 Dive Operations Surveys

Underwater surveys will be used to record and quantify existing or new defects; any reports provided will include photographs of significant defects, including underwater photographs or video if water visibility permits.

5.11 Environmental

Any spillage of substances hazardous to health used on any diving project must be notified immediately to the Authorising Person and/or the relevant harbour authority.

5.12 Known Site Hazards

The Diving Contractor must request and ensure its receipt of information about known site hazards (e.g. underwater obstructions, outfalls, weirs or contaminated water) from the harbour authority and/or the company, prior to completion of the DPP and the conduct of diving operations.

The company is obligated to provide details to the Dive Supervisor of all known underwater or above-water site hazards, activities or substances in the vicinity of the diving project which may affect the health and safety of the dive team.

For company-operated harbours, a list of 'Current Dive Hazards' documents has been created and these documents are to be utilised by the Authorising Person as the basis for provision of known dive hazards, supplemented by any other relevant known hazards which become relevant at the time of any proposed dive project. These documents shall be reviewed, maintained and updated as described in the Instruction Note document.

5.13 Accident and Near Miss Reporting

The Diving Contractor must familiarise itself and comply with the company and/or harbour authority's systems for reporting and investigating accidents and near misses.