

# **DIVER CERTIFICATION BOARD OF CANADA**

## **Guidelines for the Accreditation of OCCUPATIONAL DIVER TRAINING AND COMPETENCY ASSESSMENT**

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### Annex A

#### **Prior Learning and Competence Assessment (PLCA)**

## **Purpose of Document**

This document sets out the requirements which must be met by a commercial diver training and/or assessment organization (the organization) if they wish their graduates to be eligible to receive a certificate of competency as a commercial diver from the Diver Certification Board of Canada (DCBC).

The organization will submit a proposal for accreditation to the DCBC showing how they will train or assess candidates for certification. The proposal will form the basis of an agreement between the DCBC and the organization which will be signed by the organization's representative. The organization's signatory is the person responsible for ensuring that all the diver competencies are met and DCBC's standards complied with. If, at any time, that person is no longer able to fulfill this function, the agreement will cease to have effect and will have to be re-established.

Any changes to the agreement must be proposed to and agreed with by DCBC before they are implemented, otherwise the agreement will be reconsidered. Any health and safety enforcement action taken against the organization will automatically trigger a review of the agreement.

## **Note re Risk during Training:**

It is considered that the training and assessment of divers takes place in an environment where the level of the risks associated with diving is increased both for the diver and the training/assessment diving staff. This is generally because the candidates have yet to achieve a level of competence to cope with unplanned underwater events. The conduct of the diving project should reflect this point in order to maintain the risk as low as is reasonably practicable particularly with respect to the size and qualifications of the diving team members conducting the assessments.

## **Definitions of Assessment and Training**

**Assessment** assessment is the comparison of the competencies of the applicant with the diver competencies described in CSA Standard Z275.4. An assessment may take place during and at the end of a diver training course, **or** to assess the competency of a diver who has experience but not proof of formal training or certification of competency.

**training** training is the elevation of the competencies of a trainee to the levels described in CSA Standard Z275.4. The trainee may be a novice or may be an experienced diver who has been assessed as lacking one or more of the competencies described in the standard.

**Note:** Definitions listed in the CSA standard Z275.4 also apply to this document.

## 1.0 Introduction

### 1.1 The Diver Certification Board of Canada

The Diver Certification Board of Canada is the principal certifying body for commercial divers working in the Canadian offshore oil and gas industry. The DCBC also makes its expertise and systems available to other jurisdictions in Canada in order to encourage the use of the board as the principal certifying body for all commercial divers in Canada.

As the basis for the above-noted certification regime the Board uses the Canadian Standards Association Competency Standard for Diving Operations (Z275.4). The Board will maintain a confidential database of all divers holding the certification of the Board

### 1.2 CSA Diving Competency Standard Z275.4

The Canadian Standards Association has produced a standard for diving competencies titled **Competency Standard for Diving Operations Z275.4**. This Standard forms the basis for all DCBC standards and includes competency standards for the following levels of diving competency:

- Restricted SCUBA Diver**
- Unrestricted SCUBA Diver**
- SCUBA Supervisor**
- SCUBA Tender**
- Restricted Surface Supplied Diver**
- Unrestricted Surface Supplied Diver**
- Surface Supplied Mixed Gas Diver**
- Surface Supplied Tender**
- Restricted Surface Supplied Supervisor**
- Unrestricted Surface Supplied Supervisor**
- Surface Supplied Mixed Gas Supervisor**
- Bell Diver**
- Bell Diving Tender**
- Bell Diving Supervisor**
- ADS Pilot**
- ADS Technician**
- ADS Supervisor**
- Hyper baric Chamber Operator (HCO)**
- Hyperbaric Life Support Technician (LST)**
- Diving Medical Technician**
- Offshore Diving Safety Specialist (DSS)**

### 1.3 Certification of graduates by the DCBC

The DCBC may issue a certificate to a candidate who successfully completes a diver training course or competency assessment, provided the training or assessment has been conducted by an organization which is recognized by the DCBC to train in a manner which will allow trainees to achieve the competencies described in CSA Standard Z275.4.

### 1.4 Cost of accreditation

Accreditation is carried out on a cost recovery basis. Although training and assessment organizations that wish to be accredited to the DCBC must deal directly with DCBC, part of the audit process will be sub-contracted to commercial diving subject-matter experts and the cost of those experts must be recovered.

The cost of accreditation will depend, to a great degree, on the clarity, or complexity, of the proposal presented by the organization to the DCBC. Organizations should expect to pay approximately CAN\$5000.00.

## **2.0 Applying For Recognition as a Training and/or an Assessment Organization**

2.1 Organizations may apply as a training organization, as an assessment organization or as a combined training and assessment organization.

2.2 The commercial diver training and assessment organization (the organization) must submit a written proposal (containing the information noted below) to the DCBC explaining how it will conduct training courses and competency assessments and how it will ensure that trainees will achieve the standards of competency described in CSA Standard Z275.4.

2.3 The DCBC, or our designate, will assess the written proposal to measure the likelihood of a candidate achieving the required competencies should he or she follow the training described.

2.4 The DCBC, or our designate, will visit and audit the organization to confirm the contents of the proposal and to ensure that diving operations can be undertaken safely at the sites proposed by the organization, using the equipment owned and/or operated by the organization. The auditor will place particular emphasis on:

- a) health and safety policy; safety management system; risk assessments; diving project plan(s); diving plant and equipment; dive sites;

- b) dive team size and qualifications; emergency arrangements;
  - c) access to medical advice, both for normal and emergency situations;
  - d) maintenance system and documentation; and quality assurance system and implementation program.
- 2.5 The aim of this audit is to ensure that the diving training will be carried out safely and that the relevant CSA diving competency standards will be trained and assessed correctly and consistently. DCBC may ask for changes to be made before allowing diver training or competence assessments to be undertaken.
- 2.6 If the proposal is successful, DCBC will give written acceptance of the diver training and competence assessment course for each of the proposed CSA recognized levels of diver competence audited.
- 2.7 Providing the training and assessment program meets the required standard, DCBC diver competence certificates will be issued to successful candidates on the recommendation of the organization.
- 2.8 If the audit is satisfactory, accreditation will be given for five years. The organization's director or manager will be required to sign a letter, confirming that the organization will abide by the DCBC/CSA standards contained in the agreement, and conform to the original specification and not deviate from them without clearance from DCBC first.
- 2.9 Organizations may be inspected periodically by a DCBC auditor throughout the time that they are running DCBC diver training or competence assessments. There will be at least one unscheduled audit every two years. Inspections will be to assess and audit:
- a) compliance with health and safety law; management of health and safety; conduct of diving projects; ability to conduct diver competence assessments; standards of assessment;
  - b) compliance with applicable safety policy, and recognition submission, and
  - c) assessment results documentation.
- 2.10 The organization must not make significant changes to its arrangements as detailed in its submission without notification to and acceptance by DCBC, and in particular must not:
- a) employ new assessment staff and or diving team members or redeploy such staff to do different kinds of work; or
  - b) use dive sites not already inspected by DCBC without prior DCBC

agreement.

- 2.11 The agreement can be withdrawn by DCBC, for just cause, at anytime. In particular DCBC will withdraw it where:
- a) there is inadequate management of health or safety, whether leading to enforcement action or not;
  - b) the organization is not complying with its proposal and terms of the agreement;
  - c) the standards of assessment of the candidates are inadequate; or
  - d) the documentation of the results of assessment is inadequate.
- 2.12 The proposal submission must include details, plans and methods on all of the following topics:
- a) the registered name of the organization and its address;
  - b) an explanation of the management structure and the names of the primary designated signatory and their deputy, who will act for the primary person in their absence;
  - c) the name of a contact person who DCBC may contact for general enquiries including telephone and facsimile numbers;
  - d) methods for establishing the medical fitness of all candidates prior to commencing training or competency assessments;
  - e) method(s) for establishing that a candidate is ready for assessment;
  - f) a complete and full description of the training course(s) for which accreditation is requested, including terminal and enabling objectives, testing, examination and assessment methods, program, structure, and sequence;
  - g) method(s) for monitoring candidate performance while they are in the water e.g. putting an assessor in the water, use of video, etc.;
  - h) method to ensure all students have access to a copy of CSA standard Z275.4 competencies so that students are aware of what is required prior to assessment taking place;
  - i) methods to ensure consistent, impartial and fair assessment of each candidate;

- j) plans of the dive sites/platforms to be used, including water depths, tidal conditions, access and egress to the water, any in water or bottom features that might be a hazard to the diver;
- k) emergency arrangements for each dive site, including the emergency communications system and transportation in an emergency;
- l) proposed daily working hours, including travel, preparation, meal breaks, study, etc. expected of the candidates;
- m) list of plant and equipment to be used and the maintenance, servicing and documentation system, including methods to ensure that defective equipment will be taken out of service;
- n) list of competent persons for the maintenance of equipment indicating how competence has been achieved;
- o) current version of the organization's diving rules;
- p) proposed systems for keeping daily records of the outcome of each assessment of each competence for every candidate, with easy reference to the assessment standards. DCBC requires the system to include signed and dated declarations by the assessor that the competence has been achieved and recorded on the day it was achieved;
- q) approaches for overcoming any difficulties candidates may have in achieving competencies;
- r) methods to address any general unsatisfactory performance or conduct, including possible disciplinary action against a candidate, and how it is to be recorded;
- s) copies of the proposed daily diving operations log required by regulations including pre dive checks. The names and duties of all the dive team and assessment staff at the dive site must be included together with the pre-dive equipment check; and
- t) methods to ensure that the diver's record their dives accurately in their daily record of diving.

### 3.0 Training Guidelines

The following information illustrates the standards which the DCBC expects to see in place in the proposal and at the training site(s). In the future it is expected that CSA will develop a training standard (Z275.5) which will supersede these guidelines.

#### 3.1 Selection of Candidates

3.1.1 Candidates for diver training must be in possession of a valid certificate of medical fitness to dive, issued by a medical physician qualified in accordance with CAN/CSA-Z275.4 section 24 and CAN/CSA-Z275.2 appendices A & B.

3.1.2 Before accepting applicants for training or competence assessment the organization must ensure that:

- a) they comply with the competency standard prerequisites and that the validity of any required qualifications are checked and if necessary confirmed with the issuing authority, any cases of doubt must be referred to DCBC for clearance;
- b) where they do not hold any qualification as a diver, applicants are to be assessed as being competent swimmers.
- c) evidence is available, either by academic qualification, or under exam conditions set up by the organization to prove that applicants are able to add, subtract, multiply and divide whole numbers, decimals and fractions; calculate percentages (non-programmable calculators may be used) and transpose and solve simple formulae such as may be required to demonstrate understanding of, for example, the Gas Laws;
- d) applicants are able to understand and make written and verbal communications easily with instructors and other trainees.

#### 3.2 Facilities / Location

A diver training and assessment organization must have the facilities to enable the required standard of training or assessment to take place. The organization must ensure that the equipment required to be used during training, including personal protective equipment, whether it is supplied by the organization or the candidate, must be maintained in good working order and be appropriately certified. Organizations must have access to the depth of water appropriate to the training or assessment to be undertaken.

### 3.3 The Minimum Qualifications of Training and Assessing Staff

#### 3.3.1 Instructors/Assessors:

- a) Instructors shall have successfully completed a recognized instructor training program. Such instructor training (a train-the-trainer course) shall be provided by an agency recognized by the education authority having jurisdiction.
- b) Dive instructors (supervisors of in-water dive training operations) shall have at least 250 days of logged supervisory experience in the category in which they are training. Days of experience as an assistant instructor may be recognized as days of supervisory experience.
- c) Bell Diver instructor/assessor must hold a certificate as a bell diver supervisor, and be medically fit to dive as Bell Diving Tender (Bellman).

#### 3.3.2 The assistant instructor:

- a) Assistant instructors of in-water diving operations shall be qualified supervisors in the category they are training, in accordance with CAN/CSA Z275.4.

#### 3.3.3 The stand-by diver must:

- a) have all theoretical and practical stand-by diver training in the category for which he/she is to be stand-by diver including:
  - 5 hrs minimum bottom time for depths less than 30 fsw
  - 10 hrs minimum bottom time for depths between 30 fsw and 60 fsw
  - 20 hrs minimum bottom time for depths greater than 60 fsw
  - a minimum of 30 minutes bottom time at the current working depth.

### 3.4 Course Staffing Levels

3.4.1 For all training courses one instructor must be nominated as the course coordinator. This course leader is responsible for the conduct and co-ordination of the training and the creation and maintenance of all required documentation and records. Other instructors may be used for sub-elements of the course but the overall responsibility rests with the nominated course leader.

3.4.2 For all in water, practical training and assessment, there are three separate functions that need to be carried out. DCBC requires that you have a minimum of two staff members to conduct the training or assessment, to provide the supervision of the dive and to act as the stand-by diver. A third person, fully qualified as a diver in the category in which training is taking place must be within five minutes of the dive site.

3.4.3 The organization may have people who can provide several or all of these functions that will allow you to rotate people around. DCBC accepts that the three functions can be performed by two staff members on the assumption that in the event of an incident the training or assessment will cease and the instructor can act as the stand-by diver.

### 3.5 Instructor/Student Ratios

3.5.1 The organization must identify the instructor/student ratio for all depths and environmental conditions.

3.5.2 For all diving operations there shall be on site an Instructor and a stand-by diver. Another staff member of the organization, fully qualified as a diver at the competency level of the training being carried out and medically fit to dive shall be, at all times, within five minutes of the dive site to assist in prolonged incidents.

3.5.3 For no-decompression diving there shall be a maximum of 4 divers in the water per Instructor. For each additional assistant instructor there can be a maximum of 2 additional trainee divers in the water.

3.5.4 For decompression diving there shall be a maximum of 2 divers compressing or committed to decompression per Instructor. In addition there shall be a maximum of 1 more diver compressing or committed to decompression per Assistant Instructor

### 3.6 Design of Training and Assessment Courses

3.6.1 The organization is responsible for the effective training or assessment of candidates and the training sequence.

3.6.2 Both theoretical and practical training elements must comply with the latest CSA standards for the relevant element. The training and assessments are formal and need to be recognized as such. The organization will develop a training strategy and document it in its submission to DCBC.

3.6.3 Training and assessments need to be comprehensive. The organization must demonstrate to DCBC that it is able to verify that candidates have conducted the required underwater exercises to a satisfactory level.

3.6.3 An operational plan and a contingency plan must be developed for each training and assessment exercise. The contingency plan should include a separate risk assessment for each dive site and for each phase of the training or assessment taking into account the candidates' diving ability at that phase of the training or assessment.

3.6.4 The contingency plan must consider emergencies where the stand-by diver would have to be deployed. The plan must demonstrate that the instructor can safely control the situation without calling for additional support, especially when the assistant instructor may be deployed in the water at the time of the emergency. Weather, tidal and other conditions which may influence the conclusions of the training or assessment should be stated explicitly.

3.6.6 Wherever possible, there should be continuity in the staff of a course, particularly with part time training. Where this continuity is not possible, alternative measures must be taken to ensure that instructors/assessors are fully briefed on the confidence and capabilities of candidates. On longer courses, there should be provision for revision of practical and theoretical aspects at the start of each term or large interruption of training.

### 3.7 Record Keeping

3.7.1 A record of the assessments/examinations completed must be maintained in such a way that the candidate can clearly see at any time what they have achieved and what they have left to achieve.

3.7.2 Diver daily records must be completed by the candidate and checked and signed off by the supervisor after each day in which diving takes place.

3.7.3 All Hyperbaric related incidents (e.g. loss of primary gas, equipment malfunction, jumping stand-by diver, diver entrapment, decompression in extreme exposure, treatments, omitted decompression, CNS Oxygen hit, bends) must be recorded within seven days and must be retained on file for five years. The record will include the dive sheet, treatment sheet and doctor's report if applicable.

### 3.8 Examination & Assessment

3.8.1 Theory is only one part of the assessment of a candidate, but it is a significant part. It is important to test this effectively. Theory exams must be conducted under exam conditions accepted for formal academic theory examinations.

3.8.2 The pass mark of all theoretical examinations will be a value to represent a sound knowledge of the required subject material. Only one re-sit of a given exam will be permitted at the same training organization per calendar year.

3.8.3 Candidates who fail a practical assessment should not continue in the training course until appropriate remedial training has been given.

3.8.4 The candidate must be made aware as soon as possible of any areas of difficulty or failure. An organization's preferred method of dealing with this will have been set out in its submission. The organization must keep a written record of failure to achieve a competence, and the manner in which it was handled in case of any

later appeal.

### 3.9 Inability to complete training or assessment

3.9.1 If, for any reason (e.g. medical) a candidate is unable to complete all training, they must return to complete the training course within three months, or they must start the whole course. If in doubt, individual cases can be referred to DCBC.

### 3.10 Appeals Policy

3.10.1 The organization must have a written policy concerning the right of a candidate to appeal an assessment decision of the organization.

3.10.2 If a training/assessment organization decides not to recommend that a candidate be given a DCBC certificate of diver competence because they have failed to reach the required standard, they should be given a copy of the appeal policy and informed about the appeals process.

## **4.0 Issuing Certificates - Administrative Arrangements**

4.1 Copies of planned course schedules must be forwarded to DCBC at the start of each year, or when application for certification of successful candidates is made.

4.2 In the application for certification of successful candidates the names and specimen signatures of two people nominated as designated signatories for the DCBC diver competence certificate application form must be provided. One of these people must sign each application form to verify that the candidate(s) have successfully achieved all the competences specified by DCBC and that the assessment/examination records have been correctly completed and signed off.

4.3 Within five working days of the completion of each training course or assessment activity a list of candidates must be sent to DCBC.

4.4 The list must contain the following information:

- a) the dates of the course;
- b) those who attended, and if returning from a previous course, the date of that course;
- c) passes with theory exam results, including if this was a re-sit exam result; failures;
- d) withdrawals for medical reasons and if they are intending to return; and withdrawals for other reasons and if they are intending to return.

- 4.5 Training/assessment records must be held for a period of at least three years after the completion date of the course/assessment.
  
- 4.6 If there are no discrepancies, DCBC will dispatch certificates to graduates of accredited diver training or assessment courses as soon after receipt of their application forms as workload permits.

## **Annex A**

### **Prior Learning and Competence Assessment (PLCA)**

#### **Guidance on what constitutes “experience”**

Experience must be recorded in a formal divers’ daily record (log book). Entries in the diver’s daily record may be verified with one or more of the diving contractors and/or supervisors for whom the diver worked. These sample verifications may be in writing and the resulting documentation retained with the candidates training or assessment record.

The practical diving experience must be at least as stated in the CSA Competency Standard for Diving Operations (Z275.4) or the equivalent standards adopted by other countries

#### **Guidance on what constitutes “prior learning”.**

Prior learning must come from formal commercial diver training courses where a certified copy of the course structure and content can be produced as evidence and retained with the candidate's records.

Records of all practical dives undertaken during these courses must be presented and include the name and location of the site at which the dive took place, the date when the dive took place, and details of the dive including the equipment type and configuration including diving suit; depth, bottom time, the required decompression; water and environmental conditions; and the name of person supervising the dive and where they can be contacted.

Claims of prior learning may be verified with the authority that conducted the training. These sample verifications will be in writing and the resulting documentation retained with the candidate's assessment record.