



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **SISOSCB316A Dive at altitude greater than 300 metres**

**Release: 2**

## **SISOSCB316A Dive at altitude greater than 300 metres**

### **Modification History**

Not Applicable

### **Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to plan and perform dives at an altitude greater than 300 metres.

### **Application of the Unit**

This unit applies to current or aspiring specialty SCUBA dive guides or instructors working in altitude conditions, 300 metres above sea level. This may include those working at mountain lakes or at other altitudes greater than 300 metres.

### **Licensing/Regulatory Information**

No licensing, regulatory or certification requirements apply to this unit at the time of endorsement.

### **Pre-Requisites**

SISOSCB301A SCUBA dive in open water to a maximum depth of 18 metres  
SISOSCB303A Complete deep dives to between 18 and 40 metres

### **Employability Skills Information**

This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

### Elements and Performance Criteria

#### ELEMENT

#### PERFORMANCE CRITERIA

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the Evidence Guide.

- |   |  |
|---|--|
| 1. Prepare for altitude dives.                        | <p>1.1. Identify <b><i>factors affected by altitude</i></b> and compare the differences between diving at altitude and at other sites.</p> <p>1.2. Calculate no-decompression limits for single and repetitive altitude dives according to <b><i>industry technical and safety criteria</i></b>.</p> <p>1.3. Determine first aid procedures for potential altitude related diving incidents, hazards and <b><i>risks</i></b>.</p> <p>1.4. Select and use SCUBA equipment and <b><i>altitude diving equipment</i></b> according to industry technical and safety criteria, <b><i>relevant legislation</i></b> and organisational policies and procedures.</p> |
| 2. Perform dives at altitude greater than 300 metres. | <p>2.1. Adjust depth gauge readings for altitude-induced errors.</p> <p>2.2. Demonstrate SCUBA diving techniques at altitude according to industry technical and safety criteria, relevant legislation and <b><i>organisational policies and procedures</i></b>.</p> <p>2.3. Monitor gauges and keep between limits due to increased risk involved in altitude diving.</p> <p>2.4. Respond to emergencies and negotiate altitude dive hazards and risks according to industry technical and safety criteria.</p> <p>2.5. Demonstrate safe ascent rate, allowing for reduction of pressure, according to no decompression limits.</p>                         |
| 3. Evaluate dive at altitude.                         | <p>3.1. Evaluate <b><i>relevant aspects</i></b> of the altitude dive.</p> <p>3.2. Identify improvements for future dives at altitude.</p>  |

## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills

- planning and organising skills to prepare for additional risks involved in diving at an altitude greater than 300 metres
- numeracy skills to:
  - calculate and adjust no decompression limits for single and repetitive altitude dives
  - determine factors affected by altitude and the differences between diving at sea level and diving at an altitude greater than 300 metres
- problem-solving skills to:
  - negotiate altitude hazards and risks
  - adapt to fresh water conditions
- communication skills to inform progress and interact with buddy throughout altitude dive
- first aid and emergency response skills appropriate to altitude dive location to enable initial response to emergencies and personal health care.

### Required knowledge

- legislation, organisational policies and procedures and industry technical and safety criteria to enable safe conduct of all altitude diving activities
- selection of SCUBA and altitude diving equipment, the advantages and disadvantages of the range of equipment and its use, care and maintenance to ensure prolonged life span
- no decompression limits for altitude diving and the affect of altitude on diving
- hazards and risks commonly associated with diving at an altitude greater than 300 metres in open water to a depth of 40 metres
- emergency, first aid and rescue procedures appropriate for potential altitude induced diving incidents to ensure risk minimisation to self and group.

## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

### Overview of assessment

#### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Evidence of the following is essential:

- applies relevant process to prepare for single and repetitive dives at an altitude greater than 300 metres and calculates no-decompression limits suitable for such dives
- identifies specific factors affected by altitude which can impact on diving and negotiates hazards and risks associated with diving at altitude, and determines first aid procedures for potential altitude diving incidents
- evaluates and reflects on own altitude diving performance to identify strengths, weaknesses and areas that need improvement.

#### **Context of and specific resources for assessment**

Assessment must ensure participation in multiple SCUBA diving activities performed at altitude to demonstrate competency and consistency of performance.

Assessment must also ensure access to:

- resources and information to plan and select appropriate equipment for the altitude diving activity
- a suitable altitude diving location, greater than 300 metres
- SCUBA equipment and altitude diving equipment.

#### **Method of assessment**

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- oral or written questioning to assess knowledge of differences between sea level and altitude diving, factors affected by altitude, and hazards and risks associated with altitude diving
- observation of safe participation in altitude diving activities and planning of no decompression limits
- third-party reports from a supervisor detailing performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

## Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Factors affected by altitude*** may include:

- buoyancy
- temperature
- partial pressure differences
- equipment needs
- density
- atmospheric pressure.

***Industry technical and safety criteria*** may include:

- British Sub-Aqua Club (BSAC)
- Professional Association of Diving Instructors (PADI)
- SCUBA Schools International (SSI).

***Risks*** may include:

- hypothermia
- group management hazards
- decompression illnesses
- hypoxia
- narcosis.

***Altitude diving equipment*** may include:

- altitude decompression tables
- dive computers
- exposure protection
- navigation equipment
- first aid equipment.

***Relevant legislation*** may include:

- occupational health and safety
- permits or permission for access
- environmental regulations
- marine regulations.

***Organisational policies and procedures*** may include:

- occupational health and safety
- communication protocols
- code of ethics
- minimal impact codes.

***Relevant aspects*** may include:

- objectives
- planning process
- activity site
- weather
- equipment selection
- clothing selection

- food selection
- instructional content
- instructional technique
- assessment technique
- group feedback
- directing techniques
- rescue techniques employed.

## **Unit Sector(s)**

Outdoor Recreation

## **Competency Field**

SCUBA