



**Australian Government**

# **SFIDIVE312A Undertake emergency procedures in diving operations using SSBA**

**Release 1**

## SFIDIVE312A Undertake emergency procedures in diving operations using SSBA

### Modification History

| Release | TP Version | Comment                                                                                                                                                                |
|---------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | SFI11v2    | Initial release. Supersedes and is not equivalent to <i>SFIDIVE304B Undertake emergency procedures in diving operations using surface-supplied breathing apparatus</i> |

### Unit Descriptor

This unit of competency involves acting as a surface and in-water standby diver, providing assistance in an emergency situation and performing a self-rescue ascent during occupational diving operations using surface-supplied breathing apparatus (SSBA).

Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.

### Application of the Unit

Completion of this and other diving units may lead to further accreditation in occupational diving by industry and/or regulatory authorities. Check with the relevant industry or regulatory body for specific requirements.

All enterprise or workplace procedures and activities are carried out according to **relevant government regulations, licensing and other compliance requirements**, including **occupational health and safety (OHS) guidelines**, and maritime and occupational diver codes of practice and procedures

Equipment operation, maintenance, repairs and calibrations are undertaken in a safe manner that conforms to manufacturer instructions. Appropriate **personal protective equipment (PPE)** is selected, checked, used and maintained.

### Licensing/Regulatory Information

Refer to Unit Descriptor

## Pre-Requisites

HLTFA311A Apply first aid

## Employability Skills Information

This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

|                                                                   |                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Elements and Performance Criteria

| ELEMENT                                                               | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Perform surface standby-diver activities for divers using SSBA     | <p>1.1. Surface standby-diver activities during <b>operations</b> conform to appropriate emergency/rescue procedures, according to the <b>equipment</b> used</p> <p>1.2. A state of readiness to ensure prompt action in the event of an <b>emergency</b> is maintained at all times</p>                                                                                       |
| 2. Perform in-water standby-diver activities using SSBA               | <p>2.1. In-water standby-diver activities during operation conform to appropriate emergency/rescue procedures, according to the equipment used</p> <p>2.2. <b>Communication</b> lines are maintained with the surface team to ensure all necessary rescue action is undertaken</p>                                                                                             |
| 3. Employ correct techniques for emergency situations when using SSBA | <p>3.1. <b>Assistance</b> is given in the recovery of an unconscious or injured diver from the surface to dry land or the deck of a dive platform in a manner that prevents further injury</p> <p>3.2. <b>Ascent</b> in an emergency situation is managed by controlling buoyancy, while identifying an emergency situation where <b>shedding weights</b> may be necessary</p> |

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

Required skills include:

- applying emergency first aid procedures
- applying emergency/rescue procedures according to the situation
- dressing appropriately for standby-diver duties and maintaining a state of readiness
- free ascending correctly, completing proper drills during ascent and on the surface
- giving expired-air resuscitation to a surfaced diver while in the water
- maintaining communication with diver's tender and following instructions
- recovering a diver in distress to the surface
- using a safety line to locate a diver in distress
- literacy skills to:
  - complete 'dive accident medical information' forms
  - follow an emergency action plan
  - keep records
  - read dive tables
  - read diver's first aid literature
  - read regulations and industry guidelines
- numeracy skills to:
  - make calculations involving pressure, volume and temperature relationships
  - use decompression information while underwater

#### Required knowledge

Required knowledge includes:

- effective methods to handle a range of physical emergencies
- emergencies that may occur during diving operations in the seafood and ornamental/aquarium industry
- free-ascent practices and associated dangers and limitations
- need for and limitations of shedding weights in particular emergency situations
- procedures related to the use of equipment in relation to identified emergencies
- risk of hyperthermia or hypothermia when fully dressed as a standby diver
- suit inflation and buoyancy compensator inflation procedures
- treatment of medical emergencies

## Evidence Guide

### 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 evidence required to demonstrate competence in this unit

Assessment must confirm the ability to:

- apply emergency/rescue procedures to:
  - conscious diver
  - unconscious diver
- communicate and follow instructions
- free ascend correctly and safely
- perform standby-diver duties
- recover a distressed diver and apply first aid
- undertake in-water surface resuscitation

Assessment must confirm knowledge of:

- hyperthermia and hypothermia
- inflation procedures and free-ascent practices
- physical emergency procedures
- shedding weights in emergency situations
- treatment of medical emergencies

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

Assessment is to be conducted at the workplace or in a simulated work environment.

Resources may include:

- diving equipment for SSBA diving operations as listed in the range of variables
- suitable diving environment

##### Method of assessment

The following assessment methods are suggested:

- observation of practical demonstration
- practical exercises
- written or oral short-answer testing

##### Guidance information for assessment

This unit may be assessed holistically with other diving units.



## Range Statement

### 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.

***Relevant government regulations, licensing and other compliance requirements*** may include:

- business or workplace operations, policies and practices
- maritime and occupational diving operations, safety at sea
- OHS hazard identification, risk assessment and control

***OHS guidelines*** may include:

- appropriate workplace provision of first aid kits
- codes of practice, regulations and/or guidance notes which may apply in a jurisdiction or industry sector
- enterprise-specific OHS procedures, policies or standards
- hazard and risk assessment of workplace, maintenance activities and control measures
- induction or training of staff in relevant OHS procedures and/or requirements to allow them to carry out their duties in a safe manner
- OHS training register
- safe systems and procedures for outdoor work, including protection from solar radiation, confined space entry and the protection of people in the workplace
- systems and procedures for the safe maintenance of property, machinery and equipment, including hydraulics and exposed moving parts
- the appropriate use, maintenance and storage of PPE

***PPE*** may include.

- buoyancy vest or personal floatation device (PFD)
- personal locator beacon or Emergency Position Indicating Radio Beacon (EPIRB)
- protective outdoor clothing for tropical conditions

| <b>RANGE STATEMENT</b>         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                | <ul style="list-style-type: none"> <li>• sun protection (e.g. sun hat, sunscreen and sunglasses)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Operations</b> may include: | <ul style="list-style-type: none"> <li>• cleaning and maintaining display tanks</li> <li>• collecting aquatic animals:               <ul style="list-style-type: none"> <li>• abalone</li> <li>• beche-de-mer</li> <li>• broodstock or seedstock</li> <li>• crayfish, lobsters and crabs</li> <li>• ornamental fish, live, rock, corals and other invertebrate</li> <li>• other molluscs</li> <li>• pearls</li> <li>• sea urchins and sponges</li> <li>• seaweed or aquatic plants</li> </ul> </li> <li>• collecting dead stock</li> <li>• collecting environmental water samples</li> <li>• eradicating or releasing predators               <ul style="list-style-type: none"> <li>• from a beach</li> <li>• from a jetty</li> <li>• from a vessel</li> </ul> </li> <li>• installing, servicing and maintaining ponds, farm environment, cages and associated equipment</li> <li>• retrieving lost tools and equipment</li> <li>• tending aquaculture animals</li> </ul> |
| <b>Equipment</b> may include:  | <ul style="list-style-type: none"> <li>• catch bags</li> <li>• communication systems:               <ul style="list-style-type: none"> <li>• topside and diver</li> <li>• power supply</li> <li>• tape recorders and tapes</li> <li>• tools</li> </ul> </li> <li>• breathing apparatus:               <ul style="list-style-type: none"> <li>• demand type (band mask and helmet)</li> <li>• free-flow type</li> </ul> </li> <li>• buoyancy compensator</li> <li>• depth-measuring instruments</li> <li>• dive computer</li> <li>• diver's suits or clothing, wet, dry or warmed</li> <li>• diving watch</li> </ul>                                                                                                                                                                                                                                                                                                                                                        |

| <b>RANGE STATEMENT</b>            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   | <ul style="list-style-type: none"> <li>• gauges</li> <li>• main and reserve air supplies</li> <li>• self-contained underwater breathing apparatus (SCUBA)</li> <li>• safety and emergency:               <ul style="list-style-type: none"> <li>• first aid</li> <li>• oxygen</li> <li>• bail out bottle</li> <li>• spare air</li> </ul> </li> <li>• safety harness</li> <li>• shot-line</li> <li>• SSBA</li> <li>• surface-supply compressor unit</li> <li>• surface-supply panel</li> <li>• umbilicals</li> <li>• weights, fins and masks</li> </ul> |
| <b>Emergency</b> may include:     | <ul style="list-style-type: none"> <li>• entanglement</li> <li>• entrapment</li> <li>• injury</li> <li>• malfunctioning equipment</li> <li>• medical</li> <li>• predator</li> </ul>                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Communication</b> may include: | <ul style="list-style-type: none"> <li>• hand signals</li> <li>• lifeline signals</li> <li>• slate</li> <li>• voice</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Assistance</b> may include:    | <ul style="list-style-type: none"> <li>• disentangle</li> <li>• in-water surface resuscitation</li> <li>• remove cause of entrapment</li> <li>• rescue:               <ul style="list-style-type: none"> <li>• conscious diver</li> <li>• unconscious diver</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                     |
| <b>Ascent</b> may include:        | <ul style="list-style-type: none"> <li>• buoyancy compensator</li> <li>• lifeline</li> <li>• shedding weights</li> <li>• stage</li> <li>• underwater propulsion device</li> <li>• with or without air supply</li> </ul>                                                                                                                                                                                                                                                                                                                                |

| RANGE STATEMENT                      |                                                                                                |
|--------------------------------------|------------------------------------------------------------------------------------------------|
| <i>Shedding weights</i> may include: | <ul style="list-style-type: none"><li>• mid-water</li><li>• seabed</li><li>• surface</li></ul> |

## Unit Sector(s)

Diving operations