



**Australian Government**

# **SFIFISH312A Perform breath-hold diving operations**

**Release 1**

## SFIFISH312A Perform breath-hold diving operations

### Modification History

| Release | TP Version | Comment   |
|---------|------------|---|
| 1       | SFI11v2    | Initial release. Supersedes and is not equivalent to <i>SFIFISH307C Perform breath-hold diving operations</i> |

### Unit Descriptor

This unit of competency involves diving in an occupational setting from either a vessel or from shore using breath-holding techniques to perform work in the fishing or aquaculture sectors of the seafood industry.

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

This unit has application for occupational diving in the fishing and aquaculture sectors only.

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***, maritime and occupational diver codes of practice and procedures and ***ecologically sustainable development (ESD) principles***.

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

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|---|--|
| 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. |
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## Elements and Performance Criteria

| ELEMENT   | PERFORMANCE CRITERIA   |
|---|--|
| 1. Prepare for dive                                 | 1.1.Pre-dive plan, <i>systems and procedures</i> , and work schedule are devised to identify hazards and contingencies according to enterprise <i>procedures</i> and industry guidelines<br>1.2.Equipment is checked to confirm suitability for planned work and serviceability<br>1.3.When used, diving assistant/observer is briefed on procedures to be used during <i>diving operation</i>   |
| 2. Perform work during a breath-hold dive           | 2.1.Water is entered and a descent is made to the required depth according to accepted <i>diving practice</i><br>2.2. <i>Equipment</i> is used to establish working environment<br>2.3.Work is performed under water according to dive plan<br>2.4.Signs and symptoms of injury and other information relevant to the situation are monitored on a continuous basis and used to assess one's <i>physical condition</i><br>2.5.Ascent from the dive and access to the shore or vessel is made correctly |
| 3. Employ techniques that reduce underwater hazards | 3.1. <i>Occupational hazards</i> that may cause injury or harm are <i>assessed</i> and action taken to remove or minimise hazards according to pre-dive plan<br>3.2.Dive procedures used are according to the pre-dive plan<br>3.3.Systems and procedures to reduce hazards are devised and implemented  |
| 4. Complete post-dive activities                    | 4.1. <i>Post-dive checks</i> are performed on all essential equipment<br>4.2.Components of diving equipment are maintained to ensure they are working efficiently and safely<br>4.3.Equipment is cleaned, dried and stowed<br>4.4.Records are completed in a legible manner and forwarded to supervisor, industry or regulatory body or stored   |

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

Required skills include:

- briefing dive assistant or observer on procedures
- conforming with breath-holding dive procedures as used by the diver:
  - clearing squeezes
  - clearing water from mask
  - donning and doffing gear above and below water
  - swimming without the effects of current
- diagnosing one's own physical condition as a result of a dive
- identifying occupational hazards under water
- perform the work specified in the range of variables applicable to the diving operation
- snorkelling
- literacy skills to complete records
- numeracy skills to make calculations associated with dive, such as depth, time, duration of submersion and number of dives

#### Required knowledge

Required knowledge includes:

- breath-holding limitations
- dangers of barotrauma, and squeezes
- dangers of cold water
- dangers of hyperventilation
- signs and symptoms of medical conditions associated with diving operations
- organisational procedures

## Evidence Guide

| <b>EVIDENCE GUIDE</b>   |  |
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| <p>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.</p> |  |
| <b>Overview of assessment</b>   |  |
| <b>Critical aspects for assessment evidence required to demonstrate competence in this unit</b>   | <p>Assessment must confirm the ability to:</p> <ul style="list-style-type: none"> <li>• perform dives in an occupational setting from either a vessel or from shore using breath-holding techniques to perform work in the fishing or aquaculture sectors of the seafood industry</li> <li>• use diving equipment:               <ul style="list-style-type: none"> <li>• clearing squeezes</li> <li>• donning and doffing weights, fins, mask and wetsuit</li> <li>• mask clearing</li> <li>• devise and implement systems and procedures that reduce underwater hazards</li> </ul> </li> <li>• self-diagnosis of one's physical condition when diving</li> </ul> <p>Assessment must confirm knowledge of:</p> <ul style="list-style-type: none"> <li>• content of the pre-dive plan that forms the basis of dive briefings</li> <li>• hazards associated with the operation</li> <li>• safety procedures associated with the operation</li> <li>• signs and symptoms of medical conditions associated with diving</li> </ul> |
| <b>Context of and specific resources for assessment</b>   | <p>Assessment is to be conducted at the workplace or in a simulated work environment.</p> <p>Resources are to include:</p> <ul style="list-style-type: none"> <li>• a range of diving equipment</li> <li>• a suitable swimming area</li> </ul>   |
| <b>Method of assessment</b>   | <p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• observation of practical demonstration</li> <li>• practical exercises</li> </ul>   |

| <b>EVIDENCE GUIDE</b>                      |   |
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|  | <ul style="list-style-type: none"><li>• project work</li><li>• written or oral short-answer testing</li></ul> |
| <b>Guidance information for assessment</b> | This unit may be assessed holistically with other units within a qualification                                |

## 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.

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| <p><b><i>Relevant government regulations, licensing and other compliance requirements</i></b> may include</p> | <ul style="list-style-type: none"> <li>• biodiversity and genetically modified organisms</li> <li>• biosecurity, translocation and quarantine</li> <li>• Australian Quarantine Inspection Service (AQIS) and other import requirements</li> <li>• business or workplace operations, policies and practices</li> <li>• ESD principles, environmental hazard identification, risk assessment and control</li> <li>• fisheries or aquaculture regulations, permits and licences</li> <li>• food safety, Hazard Analysis Critical Control Point (HACCP), hygiene and temperature control along chain of custody</li> <li>• health and welfare of aquatic animals</li> <li>• Indigenous land rights and cultural activities, including fishing by traditional methods</li> <li>• maritime and occupational diving operations, safety at sea and pollution control</li> <li>• OHS hazard identification, risk assessment and control</li> </ul> |
| <p><b><i>OHS guidelines</i></b> may include:</p>  | <ul style="list-style-type: none"> <li>• appropriate workplace provision of first aid kits and fire extinguishers</li> <li>• codes of practice, regulations and/or guidance notes which may apply in a jurisdiction or industry sector</li> <li>• enterprise-specific OHS procedures, policies or standards</li> <li>• hazard and risk assessment of workplace, maintenance activities and control measures</li> <li>• induction or training of staff, contractors and visitors in relevant OHS procedures and/or requirements to allow them to carry out their duties in a safe manner</li> <li>• OHS training register</li> </ul>   |



| <b>RANGE STATEMENT</b>             |   |
|------------------------------------|---|
|                                    | <ul style="list-style-type: none"> <li>• safe lifting, carrying and handling techniques, including manual handling, and the handling and storage of hazardous substances</li> <li>• safe systems and procedures for outdoor work, including protection from solar radiation, fall protection, confined space entry and the protection of people in the workplace</li> <li>• systems and procedures for the safe maintenance of property, machinery and equipment, including hydraulics and exposed moving parts</li> <li>• the appropriate use, maintenance and storage of PPE</li> </ul>   |
| <i>ESD principles</i> may include: | <ul style="list-style-type: none"> <li>• applying animal welfare ethics and procedures</li> <li>• controlling effluents, chemical residues, contaminants, wastes and pollution</li> <li>• controlling weeds, pests, predators and diseases, and stock health maintenance</li> <li>• improving energy efficiency</li> <li>• increasing use of renewable, recyclable and recoverable resources</li> <li>• maintaining biodiversity by sustainable fisheries or broodstock/seedstock collection</li> <li>• minimising noise, dust, light or odour emissions</li> <li>• reducing emissions of greenhouse gases</li> <li>• reducing use of non-renewable resources</li> <li>• reducing energy use</li> <li>• reducing interactions with native and protected flora and fauna, marine or land parks or areas</li> <li>• reducing live cultured or held organisms from escaping into environment</li> <li>• undertaking environmental hazard identification, risk assessment and control</li> <li>• undertaking facility quarantine, biosecurity and translocation of livestock and genetic material</li> <li>• using and recycling of water, and maintaining water quality</li> </ul> |
| <i>PPE</i> may include:            | <ul style="list-style-type: none"> <li>• buoyancy vest or personal floatation device (PFD)</li> <li>• personal locator beacon or Emergency Position Indicating Radio Beacon (EPIRB)</li> <li>• sun protection (e.g. sun hat, sunscreen and</li> </ul>   |

| <b>RANGE STATEMENT</b>                     |  |
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|  | sunglasses)  |
| <i>Systems and procedures</i> may include: | <ul style="list-style-type: none"> <li>• briefings</li> <li>• check in and out</li> <li>• direct supervision</li> </ul>  |
| <i>Procedures</i> may include:             | <ul style="list-style-type: none"> <li>• communication techniques</li> <li>• duration of submersion</li> </ul>   |
| <i>Diving operations</i> may include:      | <ul style="list-style-type: none"> <li>• checking underwater equipment</li> <li>• collecting sea animals: <ul style="list-style-type: none"> <li>• abalone</li> <li>• beche-de-mer</li> <li>• crayfish</li> <li>• molluscs</li> <li>• sea urchin</li> </ul> </li> <li>• tending aquacultured animals</li> <li>• collecting lost tools and equipment, dead animals, and debris</li> <li>• installing, servicing and maintaining ponds and associated equipment</li> </ul> |
| <i>Diving practice</i> may include:        | <ul style="list-style-type: none"> <li>• checking for underwater dangers</li> <li>• eliminating eardrum barotrauma</li> <li>• eliminating the danger of cold water cramp and hypothermia</li> <li>• eliminating reverse blockages</li> </ul>   |
| <i>Equipment</i> may include:              | <ul style="list-style-type: none"> <li>• buoyancy vest</li> <li>• catch bag and tool kit</li> <li>• face mask and snorkel</li> <li>• fins</li> <li>• gloves</li> <li>• safety line</li> <li>• weights</li> <li>• wetsuit</li> </ul>  |
| <i>Physical condition</i> may include:     | <ul style="list-style-type: none"> <li>• bites, stings or punctures from aquatic organisms</li> <li>• burns</li> <li>• ear problems: <ul style="list-style-type: none"> <li>• colds, influenza and ear, nose and throat infections</li> <li>• eardrum barotrauma</li> </ul> </li> <li>• hyperventilation</li> </ul>  |

| <b>RANGE STATEMENT</b>                   |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>• hypothermia</li> <li>• near drowning and saltwater aspiration</li> <li>• shock from bleeding</li> <li>• squeezes</li> </ul>  |
| <i>Occupational hazards</i> may include: | <ul style="list-style-type: none"> <li>• aquatic animals</li> <li>• cold water cramp</li> <li>• eardrum barotrauma</li> <li>• hyperventilation</li> <li>• hypothermia</li> <li>• lack of swimming ability</li> <li>• reverse blockages and squeezes</li> <li>• underwater dangers or snags</li> <li>• underwater terrain</li> </ul>   |
| <i>Assessed</i> may include:             | <ul style="list-style-type: none"> <li>• listing hazards</li> <li>• describing the causes of hazards</li> <li>• indicating when hazards might occur</li> <li>• describing the likelihood of the hazard occurring</li> </ul>   |
| <i>Post-dive checks</i> may include:     | <ul style="list-style-type: none"> <li>• deterioration of rubber and straps</li> <li>• presence, suitability and operability of:               <ul style="list-style-type: none"> <li>• diving equipment</li> <li>• safety and emergency equipment</li> </ul> </li> <li>• seals:               <ul style="list-style-type: none"> <li>• face mask</li> <li>• wetsuit</li> </ul> </li> </ul> |

## Unit Sector(s)

Fishing operations