



**Australian Government**

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

# **SFIFISH214B Contribute to at-sea processing of seafood**

**Release: 1**

## **SFIFISH214B Contribute to at-sea processing of seafood**

### **Modification History**

Not Applicable

## Unit Descriptor

Unit descriptor	<p>This unit of competency involves the processing of seafood on board a fishing vessel, including sorting, preventing spoilage, grading, packing, labelling, chilling, freezing and unloading the catch.</p> <p>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.</p>
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## Application of the Unit

Application of the unit	<p>This unit has application to a deckhand on a fishing vessel that processes catch whilst at sea. Processing immediately after harvest means the catch enters the cold chain at peak quality. Vessels can extend the time they stay at sea before having to unload the catch at port or to another vessel. Skills in sorting, grading and labelling and preventing spoilage are also transferrable to on-shore seafood processing facilities.</p> <p>In some cases a refrigerated area may be classed as a confined space, in which case entry may be subject to licensing requirements in some states and territories. Operation of some load shifting equipment may also be subject to licensing requirements. This unit does not cover the requirements to obtain licences.</p> <p>All enterprise or workplace procedures and activities are carried out according to <b><i>relevant government regulations, licensing and other compliance requirements</i></b>, including <b><i>occupational health and safety (OHS) guidelines, food safety and hygiene regulations and procedures</i></b> and <b><i>ecologically sustainable development (ESD) principles</i></b>.</p> <p>Equipment operation, maintenance, repairs and calibrations are undertaken in a safe manner that conforms to manufacturer instructions. Appropriate <b><i>personal protective equipment (PPE)</i></b> is selected, checked, used and maintained.</p>
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## Licensing/Regulatory Information

Refer to Unit Descriptor

## Pre-Requisites

Prerequisite units		
	SFICORE101C	Apply basic food handling and safety practices

## Employability Skills Information

Employability skills	This unit contains employability skills.
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## 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.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Sort targeted seafood products from by-catch and other matter	<p>1.1. <b>Sorting area</b> is prepared to receive the new catch and the new catch is separated from the previous catch.</p> <p>1.2. Various seafood species are correctly identified and separated from other matter.</p> <p>1.3. Defective products are isolated from good quality products.</p> <p>1.4. <b>By-catch</b> is correctly identified and handled quickly and safely.</p>
2. Grade seafood products according to enterprise specifications	<p>2.1. Identify and <b>grade</b> seafood products according to species, quality and size to meet enterprise, customer and legislative requirements.</p> <p>2.2. Clean and sanitise grading area and equipment after use.</p>
3. Undertake spoilage prevention process	<p>3.1. Product washing procedures are carried out appropriately.</p> <p>3.2. <b>Seafood product protective processes</b> are safely carried out.</p> <p>3.3. Processing plant and equipment are cleaned and sanitised after use.</p>
4. Pack, weigh, close and label seafood products	<p>4.1. Accuracy of <b>scales</b> is checked according to enterprise and supplier procedures.</p> <p>4.2. <b>Enterprise specifications for packing, weighing, closing and labelling seafood products</b> are correctly followed.</p> <p>4.3. Processing plant and equipment are cleaned and sanitised after use.</p>
5. Store seafood products in raw seawater tank, chiller or freezer	<p>5.1. <b>Chilling or freezing area is prepared</b> to receive <b>seafood products</b>.</p> <p>5.2. Chilling or freezing area is correctly loaded to ensure required product temperature is maintained.</p> <p>5.3. Products are monitored and maintained while in the chilling or freezer area.</p>
6. Unload seafood products	<p>6.1. Seafood products are <b>unloaded</b> in a manner that maintains quality and temperature according to enterprise, food safety and legislative requirements.</p> <p>6.2. Chilling or freezing area and unloading equipment are cleaned.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

- checking the grading accuracy
- cleaning and maintaining the workplace and work area
- disposing correctly and safely of unwanted and disallowed by-catch
- grading products according to enterprise requirements
- loading products correctly into chilling or freezing area
- monitoring the quality of products while they are in the chilling or freezing area
- packing, weighing and labelling seafood products according to enterprise requirements
- sorting the catch according to enterprise requirements and industry regulations
- unloading products so that the cold chain is maintained
- washing the product and applying correct spoilage-prevention measures.

#### Literacy skills used for:

- reading and following workplace instructions
- reading and labelling product information on packed seafood products
- reading scales, temperature gauges, chemical labels and manufacturer instructions.

#### Numeracy skills used for:

- counting quantity of seafood product, containers and other related packaging equipment.

#### Required knowledge

- application of seafood spoilage-prevention methods
- by-catch regulations
- enterprise and industry standards for the processing of export and domestic products
- OHS requirements when working with chemicals
- personal, workplace and product hygiene.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
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.	
<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 perform all the tasks required to contribute to the at-sea processing of seafood product so as to maintain the quality of the product at all times.</p> <p>Assessment must confirm the ability to:</p> <ul style="list-style-type: none"> <li>• sort catch</li> <li>• identify species and correctly handle by-catch</li> <li>• wash, grade and pack product according to enterprise and regulatory standards</li> <li>• load chilling or freezing compartments</li> <li>• monitor and maintain product, chiller and freezer temperatures</li> <li>• unload seafood products.</li> </ul> <p>Assessment must confirm knowledge of:</p> <ul style="list-style-type: none"> <li>• by-catch regulations</li> <li>• chemical storage and safety</li> <li>• chilling and freezing techniques and maintenance of the cold chain</li> <li>• enterprise and regulatory quality procedures for at-sea processing of seafood</li> <li>• food handling and safety regulations</li> <li>• procedures for entering confined spaces.</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 may include:</p> <ul style="list-style-type: none"> <li>• operational vessel with a range of equipment</li> <li>• seafood product and processing equipment or machinery</li> <li>• enterprise policies and procedures manual.</li> </ul>

<b>EVIDENCE GUIDE</b>	
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• written or oral short-answer testing</li> <li>• observation of practical demonstration</li> <li>• practical exercises</li> <li>• project work.</li> </ul>
<b>Guidance information for assessment</b>	<p>This unit may be assessed holistically with other units within a qualification, for example, SFIFISH209C Maintain the temperature of seafood.</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>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.</p>	
<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>• correct marketing names and labelling</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>• 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> </ul>



**RANGE STATEMENT**

	<ul style="list-style-type: none"> <li>• clean, uncluttered, hygienic workplace</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>• licensing for high risk activities, such as confined space entry and load-shifting equipment in some states and territories</li> <li>• OHS training register</li> <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>
<p><i>Food safety and hygiene regulations and procedures</i> may include:</p>	<ul style="list-style-type: none"> <li>• Australian Shellfish Sanitation program</li> <li>• display, packaging and sale of food, including seafood and aquatic products</li> <li>• equipment design, use, cleaning and maintenance</li> <li>• exporting requirements, including AQIS Export Control (Fish) orders</li> <li>• handling and disposal of condemned or recalled seafood products</li> <li>• HACCP and other risk minimisation systems</li> <li>• location, construction and servicing of seafood premises</li> <li>• people, product and place hygiene and sanitation requirements</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• Primary Products Standard and the Australian Seafood Standard (voluntary)</li> <li>• processing, further processing and preparation of food, including seafood and aquatic products</li> <li>• product labelling, tracing and recall</li> <li>• receipt, storage and transportation of food, including seafood and aquatic products</li> <li>• requirements set out in Australian and New Zealand Food Authority (ANZFA) Food Standards Code</li> <li>• temperature and contamination control along chain of custody.</li> </ul>
<b>ESD principles</b> 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>• minimising noise, dust, light or odour emissions</li> <li>• reducing energy use</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>
<b>PPE</b> may include:	<ul style="list-style-type: none"> <li>• buoyancy vest or personal floatation device (PFD)</li> <li>• gloves, mitts or gauntlets, and protective hand and arm covering</li> <li>• hard hat or protective head covering</li> <li>• hearing protection (e.g. ear plugs and ear muffs)</li> <li>• insulated protective clothing for freezers or chillers and refrigeration units</li> <li>• non-slip and waterproof boots (gumboots) or other safety footwear</li> <li>• personal locator beacon or Emergency Position Indicating Radio Beacon (EPIRB)</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• protective eyewear, glasses and face mask</li> <li>• protective hair, beard and boot covers</li> <li>• protective outdoor clothing for tropical conditions</li> <li>• respirator or face mask</li> <li>• safety harness</li> <li>• sun protection (e.g. sun hat, sunscreen and sunglasses)</li> <li>• uniforms, overalls or protective clothing (e.g. mesh and waterproof aprons)</li> <li>• waterproof clothing (e.g. wet weather gear and waders).</li> </ul>
<b>Sorting area</b> may include:	<ul style="list-style-type: none"> <li>• deck</li> <li>• sorting table</li> <li>• undercover or exposed.</li> </ul>
<b>By-catch</b> may be:	<ul style="list-style-type: none"> <li>• retained</li> <li>• returned to sea.</li> </ul>
<b>Grading</b> may be according to:	<ul style="list-style-type: none"> <li>• enterprise and/or customer specifications</li> <li>• size</li> <li>• species</li> <li>• quantity</li> <li>• quality</li> <li>• legislative requirements.</li> </ul>
<b>Seafood product protective processes</b> may include:	<ul style="list-style-type: none"> <li>• Antidot</li> <li>• enterprise or food safety washing procedures</li> <li>• Everfresh</li> <li>• HQBacterol F</li> <li>• metabisulphite</li> <li>• salt.</li> </ul>
<b>Scales</b> may be:	<ul style="list-style-type: none"> <li>• electronic</li> <li>• computerised</li> <li>• manual.</li> </ul>
<b>Enterprise specifications for packing, weighing, closing and labelling seafood products</b> may include:	<ul style="list-style-type: none"> <li>• packing: <ul style="list-style-type: none"> <li>• bags</li> <li>• cartons</li> <li>• containers</li> <li>• fish bins</li> <li>• live tanks</li> </ul> </li> <li>• weighing:</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• random or fixed weight</li> <li>• net or gross weight</li> <li>• legislated or enterprise tolerance range</li> <li>• package closure methods:             <ul style="list-style-type: none"> <li>• adhesive tape</li> <li>• glue</li> <li>• self-closing tabs</li> <li>• strapping machine</li> </ul> </li> <li>• labelling requirements:             <ul style="list-style-type: none"> <li>• additives</li> <li>• cooked or raw</li> <li>• placement</li> <li>• product type</li> <li>• product type</li> <li>• species</li> <li>• species</li> <li>• stick on, stamped or marked</li> <li>• temperature</li> <li>• weight.</li> </ul> </li> </ul>
<i>Chilling or freezing area</i> may be <i>prepared</i> for:	<ul style="list-style-type: none"> <li>• chilling:             <ul style="list-style-type: none"> <li>• ice</li> <li>• ice slurry</li> <li>• refrigerated air</li> <li>• refrigerated seawater (RSW)</li> </ul> </li> <li>• freezing:             <ul style="list-style-type: none"> <li>• blast freezer</li> <li>• cryogenic freezer</li> <li>• immersion freezer</li> <li>• plate freezer.</li> </ul> </li> </ul>
<i>Seafood products</i> may include:	<ul style="list-style-type: none"> <li>• chilled or frozen products</li> <li>• fish fillets</li> <li>• gilled and gutted fish</li> <li>• half shellfish</li> <li>• head and gutted fish</li> <li>• shellfish (live or dead)</li> <li>• shellfish meat</li> <li>• whole fish (live or dead).</li> </ul>

**RANGE STATEMENT****Unloading** may:

- be from a:
  - chiller
  - freezer
  - RSW tank
  - deck bin
  - live tank
- be to a:
  - freezer truck
  - truck with fish bins
  - live holding tank
  - another vessel
- involve an unloading method, such as:
  - booms, winches and cranes
  - by hand
  - conveyor belt
  - pallets.

**Unit Sector(s)**

<b>Unit sector</b>	Fishing operations
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**Co-requisite units**

<b>Co-requisite units</b>		

## Competency field

Competency field	
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