



Australian Government

Department of Education, Employment and Workplace Relations

SFIAQUA503C Establish an aquacultural enterprise

Release: 1

SFIAQUA503C Establish an aquacultural enterprise

Modification History

Not Applicable

Unit Descriptor

<p>Unit descriptor</p>	<p>This unit of competency involves establishing an aquacultural or ornamental business or enterprise. An enterprise may be interpreted as a development initiative which will involve commitment of resources to support an activity that will have achievable outcomes. Competency involves the self-directed development of knowledge with substantial depth across a number of areas with a range of skills. Business planning and management competencies are usually used independently and are substantially non-routine. Significant judgement is required.</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

<p>Application of the unit</p>	<p>This unit applies to a start-up business or an established business expanding its production levels or changing its production focus to a new species or development stage. Examples might be a new hatchery shed, production unit facility or a consulting or advisory service.</p> <p>The establishment of an enterprise is likely to be undertaken alone or under limited guidance in line with a broad plan, budget or strategy. Designing and planning of stock culture or holding systems and structures are covered in SFIAQUA508C Plan and design stock culture or holding structures and systems.</p> <p>Designing and planning water supply and disposal systems are covered in SFIAQUA507C Plan and design water supply and disposal systems.</p> <p>All enterprise or workplace procedures and activities are carried out according to <i>relevant government regulations, licensing and other compliance requirements, including occupational health and safety (OHS) guidelines, food safety and hygiene regulations and procedures and ecologically sustainable development (ESD) principles.</i></p> <p>Equipment operation, maintenance, repairs and calibrations are undertaken in a safe manner that conforms to manufacturer instructions. Appropriate <i>personal</i></p>
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	<i>protective equipment (PPE)</i> is selected, checked, used and maintained.
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units	

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. Define enterprise requirements	1.1. Target market opportunity or business need is defined based on appropriate evidence, industry practice and reasoned argument or analysis. 1.2. Selection of species, culture technology and size of operation are based on this analysis and included in business plan. 1.3. Mechanisation or automation of process or activity, including the use of specialised contract services, is researched and introduced. 1.4. Legal requirements impacting on a proposed enterprise are identified.
2. Choose a <i>worksite</i>	2.1. Property market is scanned for purchase or leasing possibilities, and site is decided upon based on business plan. 2.2. Contractual arrangements are entered into based on legal requirements and business plan.
3. Develop a worksite plan	3.1. Features of the site are incorporated into worksite plan to allow most effective construction program. 3.2. Construction plan , including budget and work schedule is drawn up in consultation with senior personnel taking into account appropriate considerations. 3.3. Relevant building or development permits or approvals are obtained.
4. Coordinate construction	4.1. Appropriate labour, materials and resources are organised and construction undertaken according to construction plan. 4.2. Contractors, consultants and construction work are monitored against drawings and work plans, and negotiation undertaken, where necessary. 4.3. Site is commissioned, ensuring all systems are operational and according to plans and permits or approvals.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- choosing an efficient worksite fit for purpose
- consulting with senior personnel on construction plan, budget and work schedule
- coordinating construction, approvals and permits
- decision making
- negotiating with contractors, consultants, suppliers and property agents
- planning to:
 - define site requirements from business plan
 - develop a construction plan, including a budget and work schedule
- researching:
 - legal requirements
 - market opportunities
 - mechanisation and automation
 - specialised contract services.

Literacy skills used for:

- interpreting aquaculture engineering publications
- reading and interpreting contracts
- reading and interpreting work plans, specifications and drawings
- reading and writing business plans and worksite construction plans
- researching and analysing information and data.

Numeracy skills used for:

- drawing up budget and work schedules
- interpreting work and site plan specifications
- negotiating with contractors and consultants.

Required knowledge

- contract and building laws and regulations
- management and employment of contractors and consultants
- mechanisation or automation of process or activity
- project and budget management
- selection of market, species, technology, site and size of operation
- site plans, specifications and working drawings
- use of specialised contract services.

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 t his unit	<p>Assessment must confirm the ability to:</p> <ul style="list-style-type: none"> • plan for the development of an aquaculture enterprise and implement the plan. <p>Assessment must confirm knowledge of:</p> <ul style="list-style-type: none"> • business planning • culture technology • regulations impacting on an aquaculture enterprise • site selection • species selection.
Context of and specific resources for assessment	<p>Assessment is to be conducted at the workplace or in a simulated work environment. The enterprise may be a new business, or a new enterprise within an existing business.</p> <p>Resources may include:</p> <ul style="list-style-type: none"> • budget • business plan.
Method of assessment	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> • project (work or scenario based) • work scenario or case study • written or oral short-answer testing.
Guidance information for assessment	This unit may be assessed holistically with other units within a qualification.

Range Statement

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:
 - commercial law, including fair trading and trade practices
 - consumer law
 - corporate law, including registration, licensing and financial reporting
 - disability policies and practices
 - equal opportunity, anti-discrimination and sexual harassment
 - industrial relations and awards, individual employment contracts and share of catch agreements
 - jurisdictional variations
 - superannuation
 - taxation
 - trade practices
 - warnings and dismissals
 - worker's compensation
- ESD principles, environmental hazard identification, risk assessment and control
- fisheries or aquaculture regulations, permits, licences, quotas, catch restrictions and other compliance requirements, including:
 - Australian Exclusive Economic Zone
 - international treaties and agreements
- food safety, Hazard Analysis Critical Control Point (HACCP), hygiene and temperature control along chain of custody
- imports quarantine and inspection, and importing approved arrangements for Australian Quarantine Inspection Service (AQIS), Australian Customs Service (ACS) and Biosecurity Australia (BA)
- Indigenous native title, land claims and cultural

RANGE STATEMENT

	<p>activities, including fishing by traditional methods</p> <ul style="list-style-type: none"> • maritime and occupational diving operations: <ul style="list-style-type: none"> • foreign and Australian legislation applying to quarantine and customs • International Convention for the Safety of Life at Sea (SOLAS) • International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW 1978) • Marine Emergency Response Search and Rescue (MERSAR) • National Standards for Commercial Vessels • pollution prevention - International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) • Uniform Shipping Laws (USL) Code • use of vessels, right of way and other marine orders, bunkering and refuelling • land, buildings and vehicles: <ul style="list-style-type: none"> • buildings and structures design and appearance, constructions and additions • poaching, trespass and theft • road laws for use of motor vehicles, bikes, trucks and other transport equipment • soil and water management • use of chemicals and biological agents • use of firearms and powerheads • use of utilities, including water, natural gas, electricity and sewage • water or land lease, tenure or ownership and use • OHS hazard identification, risk assessment and control • product quality assurance: <ul style="list-style-type: none"> • correct naming and labelling (e.g. country of origin, Australian Fish Names Standard and eco-labelling) • correct quantities, sizes and other customer requirements • third-party certification (e.g. Australian
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RANGE STATEMENT	
	Grown and ISO 14001:2004 Environmental management systems).
<i>OHS guidelines</i> may include:	<ul style="list-style-type: none"> • appropriate workplace provision of first aid kits and fire extinguishers • clean, uncluttered, hygienic workplace • 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, contractors and visitors in relevant OHS procedures and/or requirements to allow them to carry out their duties in a safe manner • OHS training register • safe lifting, carrying and handling techniques, including manual handling, and the handling and storage of hazardous substances • 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 • 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.
<i>Food safety and hygiene regulations and procedures</i> may include:	<ul style="list-style-type: none"> • Australian Shellfish Sanitation program • display, packaging and sale of food, including seafood and aquatic products • equipment design, use, cleaning and maintenance • exporting requirements, including AQIS Export Control (Fish) orders • handling and disposal of condemned or recalled seafood products • HACCP, food safety program, and other risk minimisation and quality assurance systems • location, construction and servicing of seafood premises

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	<ul style="list-style-type: none"> • people, product and place hygiene and sanitation requirements • Primary Products Standard and the Australian Seafood Standard (voluntary) • processing, further processing and preparation of food, including seafood and aquatic products • product labelling, tracing and recall • receipt, storage and transportation of food, including seafood and aquatic products • requirements set out in Australian and New Zealand Food Authority (ANZFA) Food Standards Code and state and territory food regulations • temperature and contamination control along chain of custody.
<i>ESD principles</i> may include:	<ul style="list-style-type: none"> • controlling use and recycling of water, and managing water quality and quantity • increasing use of renewable, recyclable and recoverable resources • managing environmental hazard identification, risk assessment and control • managing imported products quarantine and inspection, facility biosecurity, translocation of livestock and genetic material, and health certification • managing stock health and welfare, especially for handling, holding, transport and slaughter • managing sustainable fisheries or broodstock/seedstock collection requirements, such as size limits, quotas, season restrictions, population dynamics, fishing impacts, reducing by-catch, fisheries management strategies and maintaining biodiversity • managing, controlling and treating effluents, chemical residues, contaminants, wastes and pollution • minimising noise, dust, light or odour emissions • planning environmental and resource efficiency improvements • preventing genetically modified and live cultured or held organisms from escaping into environment

RANGE STATEMENT	
	<ul style="list-style-type: none"> • protecting native and protected flora and fauna, marine or land parks or areas, adhering to the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), the Ramsar Convention, World Heritage and other international treaties for which Australia is a signatory • reducing emissions of greenhouse gases • reducing use of non-renewable resources • reducing disturbances to soils, erosion and surface water flows from machinery use and other activities • reducing energy use and introducing alternative energy sources.
PPE may include:	<ul style="list-style-type: none"> • buoyancy vest or personal floatation device (PFD) • gloves, mitts or gauntlets, and protective hand and arm covering • hard hat or protective head covering • hearing protection (e.g. ear plugs and ear muffs) • insulated protective clothing for freezers or chillers and refrigeration units • non-slip and waterproof boots (gumboots) or other safety footwear • personal locator beacon or Emergency Position Indicating Radio Beacon (EPIRB) • protective eyewear, glasses and face mask • protective hair, beard and boot covers • protective outdoor clothing for tropical conditions • respirator or face mask • safety harness • sun protection (e.g. sun hat, sunscreen and sunglasses) • uniforms, overalls or protective clothing (e.g. mesh and waterproof aprons) • waterproof clothing (e.g. wet weather gear and waders).
Worksite may include:	<ul style="list-style-type: none"> • depots • growing or holding facilities • hatchery and nursery

RANGE STATEMENT	
	<ul style="list-style-type: none"> • office and administration • post-harvest or processing facilities • shop • storage areas • workshops.
<i>Construction plan</i> takes into account:	<ul style="list-style-type: none"> • business planning • climatic conditions and changes • ESD and OHS requirements • marketing requirements • production amounts/scheduling • seasonal variations of production cycle • staff and contractor availability • strategic direction of business.

Unit Sector(s)

Unit sector	Aquaculture operations
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Co-requisite units

Co-requisite units	

Competency field

Competency field	
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