

**Modification history**

Release	Comments
Release 1	This version released with SFI Seafood Industry Training Package Version 1.0.

<b>SFIAQU214</b>	<b>Produce algal or live-feed cultures</b>
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to initiate, maintain and harvest algal or live-feed cultures.</p> <p>The unit applies to individuals who undertake routine tasks in producing algal and live-feed cultures in an aquaculture setting under the direction of a supervisor.</p> <p>All work must be carried out to comply with workplace procedures, according to state/territory health and safety, food safety, biosecurity and environmental regulations, legislation and standards that apply to the workplace.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Aquaculture (AQU)

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for production	1.1 Receive instructions for production schedule from supervisor and confirm understanding 1.2 Collect required equipment, including personal protective equipment, and check for serviceability 1.3 Make basic repairs to sub-standard equipment and calibrate equipment where required 1.4 Perform workplace personal hygiene and equipment sanitation procedures for undertaking axenic culture techniques 1.5 Collect data or record sheets and move them to culture area
2. Initiate and maintain cultures	2.1 Fill production vessels with treated water, inoculate culture vessels and add nutrients and other elements according to workplace procedures 2.2 Maintain physio-chemical requirements of the culture organism for the culture period 2.3 Monitor culture health and report irregularities to supervisor 2.4 Remove wastes and maintain water levels and hygienic growing conditions 2.5 Operate and maintain automatic or mechanised equipment according to manufacturer instructions and health and safety practices
3. Harvest culture	3.1 Collect harvesting equipment and check for serviceability 3.2 Clean and sanitise collection vessels before and after use according to workplace procedures 3.3 Harvest required quantity and transfer for feeding to predator species
4. Complete post-culture production activities	4.1 Clean work area and dispose of waste materials safely according to health and safety and environmental requirements and workplace procedures 4.2 Check and store tools and equipment, reporting any identified repair requirements to supervisor 4.3 Record relevant data and observations relating to culture in workplace record or data sheets and report any abnormal records to supervisor

<b>Foundation Skills</b>	
<i>This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.</i>	
<b>Skill</b>	<b>Description</b>
Reading	<ul style="list-style-type: none"> <li>Interpret text in workplace procedures, production schedules and manufacturer instructions</li> <li>Interpret labels, warning and safety signs, and gauges and meters</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Complete workplace records legibly and accurately</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Calculate culture periods</li> <li>Count or determine density of algal or live-feed culture organisms</li> <li>Estimate volume for diluting salinity</li> <li>Estimate and measure chemical volumes and weights</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Ask questions to clarify job requirements</li> <li>Use correct terminology to describe abnormal records</li> </ul>
Interact with others	<ul style="list-style-type: none"> <li>Follow accepted practices and protocols for reporting issues or seeking guidance from supervisors</li> </ul>
Get the work done	<ul style="list-style-type: none"> <li>Make routine decisions about culture-growing environment and culture health abnormalities or irregularities</li> <li>Use functions and features of digital recording technology and automated production and harvest equipment</li> </ul>

<b>Unit Mapping Information</b>			
<b>Code and title current version</b>	<b>Code and title previous version</b>	<b>Comments</b>	<b>Equivalence status</b>
SFIAQU214 Produce algal or live-feed cultures	SFIAQUA214B Produce algal or live-feed cultures	Updated to meet Standards for Training Packages Minor changes to some performance criteria for clarity	Equivalent Unit

<b>Links</b>
Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273</a>

<b>TITLE</b>	<b>Assessment requirements for SFIAQU214 Produce algal or live-feed cultures</b>
<b>Performance Evidence</b>	
<p>An individual demonstrating competency must satisfy all the elements and performance criteria of this unit. There must be evidence that the individual has produced algal or live-feed cultures on at least one occasion including:</p> <ul style="list-style-type: none"> <li>• using required personal protective equipment</li> <li>• maintaining personal hygiene and equipment sanitation to workplace standards</li> <li>• communicating with and reporting to supervisor on production activities</li> <li>• establishing cultures by adding inoculation cultures and nutrients to production vessels</li> <li>• maintaining and monitoring health of cultures and growing conditions</li> <li>• operating and maintaining production and harvest equipment</li> <li>• removing waste and maintaining water levels</li> <li>• harvesting algal or live-feed cultures</li> <li>• recording workplace data related to the production of algal or live-feed cultures</li> <li>• cleaning up work area and equipment and storing tools and equipment</li> <li>• following health and safety and environmental requirements.</li> </ul>	
<b>Knowledge Evidence</b>	
<p>An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:</p> <ul style="list-style-type: none"> <li>• culture periods and life cycles of culture organisms</li> <li>• purpose and operation of algal or live-feed culture production and harvest equipment</li> <li>• basic physio-chemical requirements of the culture organisms</li> <li>• workplace procedures including hygiene and environmental requirements for producing and harvesting algal or live-feed cultures</li> <li>• work health and safety requirements relating to producing algal and live-feed cultures</li> <li>• relevant legislation relating to producing algal or live-feed cultures.</li> </ul>	
<b>Assessment Conditions</b>	
<p>Assessment of this unit of competency must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions: <ul style="list-style-type: none"> <li>• skills must be demonstrated in an aquaculture workplace setting or an environment that accurately represents workplace conditions</li> </ul> </li> <li>• resources, equipment and materials: <ul style="list-style-type: none"> <li>• production and harvest equipment for producing algal or live-feed cultures</li> <li>• personal protective equipment</li> <li>• inoculation cultures and nutrients</li> <li>• production vessels</li> <li>• treated water</li> <li>• data or recording sheets</li> </ul> </li> <li>• specifications: <ul style="list-style-type: none"> <li>• production schedule</li> <li>• manufacturer guidelines or manual for operation and service of equipment</li> <li>• workplace procedures for producing algal or live-feed cultures, including advice on health and safety, personal hygiene, equipment sanitation, and environmental requirements</li> </ul> </li> <li>• relationships: <ul style="list-style-type: none"> <li>• interactions with supervisor</li> </ul> </li> </ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
<b>Links</b>	Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273</a>