



Australian Government

SFIAQU306 Monitor production and maintain algal or live-feed cultures

Release: 1

SFIAQU306 Monitor production and maintain algal or live-feed cultures

Modification History

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

Application

This unit of competency describes the skills and knowledge required to monitor the production, maintenance and harvesting of algae and/or live feed cultures to be fed to cultured or held aquatic stock. It includes the ability to plan for production, initiate and grow cultures and organise their harvest.

The unit applies to individuals who have responsibility for the production of cultures in an aquaculture environment, working under broad direction.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety, biosecurity and environmental regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Aquaculture (AQU)

Elements and Performance Criteria

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. Plan for production	1.1 Interpret and confirm production schedule with supervisor 1.2 Confirm labour and equipment requirements with supervisor

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify risk factors that could affect the quality of algal or live-feed cultures during production and plan to minimise risk 1.4 Assemble culture system for use according to workplace procedures 1.5 Communicate workplace production procedures and safety precautions to team members
2. Prepare for initiation and maintenance of algal or live-feed cultures	2.1 Check production vessels or structures and other equipment, including personal protective equipment, for serviceability 2.2 Treat culture water to meet the physicochemical requirements of the cultured organism 2.3 Inoculate cultures to meet the required stocking density 2.4 Prepare nutriment formulae or media according to workplace procedures
3. Monitor and maintain culture production	3.1 Measure and maintain physicochemical requirements of the culture organism for the culture period 3.2 Maintain hygienic culture conditions and equipment 3.3 Check culture health regularly by sampling the culture water, and take appropriate action to achieve the production schedule
4. Harvest culture	4.1 Collect and check harvesting equipment for serviceability 4.2 Clean and sanitise production vessels and equipment according to workplace procedures 4.3 Confirm quantity of culture required and harvest according to workplace procedures 4.4 Treat and dispose of unused cultures and wastes according to workplace procedures and environmental requirements
5. Complete culture production activities	5.1 Check cleaning of work area and disposal of waste materials are completed according to workplace procedures 5.2 Check condition, maintenance requirements and storage of tools and equipment 5.3 Record relevant data and observations, and report any abnormal records to supervisor

Foundation Skills

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.

Skill	Description
Reading	Interprets specifications for nutriment formulae or media requirements
Writing	Completes workplace records and reports legibly and accurately using correct technical terminology
Numeracy	- Estimates labour time and equipment needed for required activities - Measures volume - Counts culture organism - Calculates culture density
Oral communication	Explains production procedures using language appropriate for audience
Navigate the world of work	Takes responsibility for decisions about when and how to complete production tasks
Interact with others	Understands what to communicate, with whom and how, in routine work situations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
SFIAQU306 Monitor production and maintain algal or live-feed cultures	SFIAQUA311B Oversee production and maintain algal or live-feed cultures	Updated to meet Standards for Training Packages Revised unit title and minor amendments to performance criteria to better reflect outcomes	Equivalent unit

Links

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

Assessment Requirements for SFIAQU306 Monitor production and maintain algal or live-feed cultures

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has monitored the production and maintenance of algal or live-feed cultures on at least one occasion, including:

- communicating with supervisor on production schedule, labour and equipment requirements
- checking the serviceability of equipment, including the fitting of personal protective equipment
- planning and communicating production procedures for algal or live-feed cultures and safety precautions to team members
- preparing nutriment formulae or media and altering the physicochemical environment to meet the culture species requirements
- monitoring the maintenance of culture production and harvest process
- maintaining accurate records on culture production activities
- maintaining a hygienic work area and equipment during and after culture production.

Knowledge Evidence

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:

- inoculation culture required to achieve stocking density
- nutriment formulae or media requirements for species during culture period
- operation process for effective production of algal or live-feed cultures:
 - setting up
 - initiating and breeding
 - monitoring health and growth
 - harvesting and cleaning up
- signs of health or ill health in species, and mitigation methods

- risk factors that could affect the quality of algal or live-feed cultures during production
- physicochemical requirements for the culture species
- cross-contamination minimisation techniques
- relevant legislation relating to algal or live-feed culture production.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in an aquaculture workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - inoculum culture
 - monitoring equipment
 - nutrient formulae or media
 - production and harvest equipment
 - personal protective equipment
 - production vessels and water treatments
 - water sampling tests
- specifications:
 - production schedule and workplace procedures for algal or live-feed cultures production, including advice on health and safety and hygiene requirements
- relationships:
 - evidence of interactions with supervisor and team members.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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