## **Modification history**

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

| SFIAQU407         | Coordinate sustainable aquacultural practices   |  |
|-------------------|---|--|
| Application       | This unit of competency describes the skills and knowledge required to coordinate sustainable operational practices and implement strategies that minimise waste, conserve energy resources and manage water use. |  |
|                   | The unit applies to individuals who have responsibility for overseeing environmental requirements in their area of operation or for their work group or team in an aquaculture facility.                          |  |
|                   | No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.   |  |
| Prerequisite Unit | Nil   |  |
| Unit Sector       | Aquaculture (AQU)   |  |

| Elements   | Performance Criteria  |
|--|---|
| Elements describe the essential outcomes.                      | Performance criteria describe the performance needed to demonstrate achievement of the element.   |
| Coordinate water quality and environmental monitoring programs | 1.1 Confirm strategies for meeting legislative and environmental obligations and allocations of labour and financial resources with senior personnel 1.2 Select water quality variables and environmental criteria to be monitored, and prepare and convey monitoring schedules to staff 1.3 Brief external contractors on management policies and priorities and required safety practices 1.4 Develop monitoring systems to ensure that the quality of the water supply system meets the requirements of the cultured or held stock 1.5 Assess and recommend options for mechanisation or automation of process or activity, including the use of specialised contract services to senior personnel |
| Develop effluent and waste treatment and disposal programs     | 2.1 Determine environmental risks and develop effluent and waste treatment and disposal programs to minimise emissions and discharges according to legislative requirements 2.2 Evaluate options for on-site or off-site disposal of wastes against environmental management plan 2.3 Minimise adverse environmental impacts due to effluent and waste treatments and disposal  |
| 3. Manage water use for facility                               | 3.1 Source water from locations other than mains water according to workplace practices 3.2 Manage on-land run-off or overflow water to optimise its use and minimise pollutants entering river and drainage systems 3.3 Position culture or holding structures to achieve appropriate water flow and quality 3.4 Develop stock production strategies to efficiently use available water supply 3.5 Develop water utilisation strategies to minimise evaporation, run-off and seepage of water 3.6 Minimise contamination of water effluent with chemicals through sound utilisation strategies   |

| Elements  | Performance Criteria  |
|---|---|
| Elements describe the essential outcomes.       | Performance criteria describe the performance needed to demonstrate achievement of the element.   |
| 4. Finalise environmental protection activities | <ul> <li>4.1 Supervise clean-up of work area, including repairing and storage of equipment, and prepare a condition report</li> <li>4.2 Record relevant environmental protection data, observations or information, and check any out of range or unusual records</li> <li>4.3 Prepare compliance and other required reports of the effectiveness of environmental protection and provide to senior personnel, including recommendations for improvements</li> <li>4.4 Give feedback to staff on their work performance</li> <li>4.5 Examine innovations in environmental protection and submit recommendations to senior personnel for implementation</li> </ul> |

| 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   | <ul> <li>Interpret monitoring schedule, environmental protection guidelines and<br/>management policies</li> <li>Analyse and audit monitoring records</li> </ul>   |  |
|   | Research and evaluate key information from a range of sources relating to work activities  |  |
| Writing   | <ul> <li>Develop and document monitoring schedules</li> <li>Prepare environmental protection data and compliance reports using accurate terminology and required formats</li> <li>Record information and data in workplace forms legibly and accurately</li> </ul> |  |
| Numeracy  | <ul> <li>Estimate time and cost of labour requirements</li> <li>Analyse numerical data in budgets and workplace records</li> </ul>   |  |
| Oral communication  | Explain water quality and environmental monitoring requirements using language appropriate for audience  |  |
| Navigate the world of work  | Keep up to date on changes to legislation or regulations relevant to own role and area of responsibility and consider implications of these when planning and undertaking work   |  |
| Interact with others  | Collaborate with others and contribute knowledge and skills to achieve sustainable aquacultural practices  |  |
| Get the work done   | Use workplace digital systems and tools to access, organise, and analyse information relevant to own role and area of responsibility   |  |

| Unit Mapping Information  |   |   |                    |
|---|---|---|--------------------|
| Code and title current version                                      | Code and title previous version                                       | Comments  | Equivalence status |
| SFIAQU407<br>Coordinate<br>sustainable<br>aquacultural<br>practices | SFIAQUA407C<br>Coordinate<br>sustainable<br>aquacultural<br>practices | Updated to meet<br>Standards for Training<br>Packages | Equivalent unit    |

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

| Assessment requirements for SFIAQU407 Coordinate |
|--|
| sustainable aquacultural practices               |

## Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria of this unit. There must be evidence that the individual has coordinated the implementation and monitoring of multiple strategies to achieve ecologically sustainable development principles on at least one occasion including:

- confirming legislative and environmental obligations with senior personnel
- conveying operational and monitoring information to others including feedback on performance
- assessing options for mechanisation or automation of process or activity, including the use of specialised contract services
- developing programs to minimise waste for the facility
- · conserving facility energy resources
- managing and monitoring facility water quality and use
- recording and reporting relevant information relating to workplace and compliance requirements.

## 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:

- legislative requirements for sustainable aquacultural practices and environmental control standards
- health and safety requirements relevant to work activities
- key principles of ecologically sustainable development relevant to aquaculture:
  - waste management recycling, reuse and reduction of wastes
  - · conservation of energy and water resources
  - energy flows and food webs
- light or noise control
- nutrient cycling
- sediment or soil testing processes and procedures, and results interpretation.

## **Assessment Conditions**

Assessment of this unit of competency 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
- specifications:
  - · key sections of legislative or environmental requirements relevant to the facility
  - workplace environmental management policies or strategies
- relationships:
  - interactions with senior personnel and contractors.

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

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